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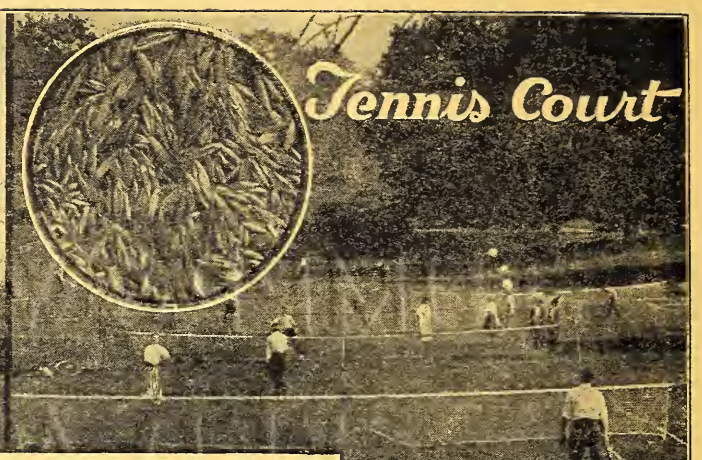
U.S.

STUMPP & WALTER CO.'S SEED ANNUAL

1924

STUMPP & WALTER CO.
30-32 BARCLAY STREET
NEW YORK CITY

D. N. Shoemaker
Feb 12 1924

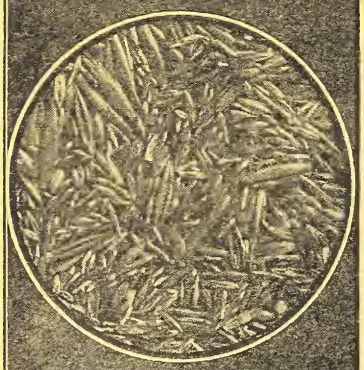


Stumpp & Walter Co

Grass Seed Mixtures

Produce Lawns which are Pleasing in Color, Perfect in Texture, and they *"Staigreen"* in spite of hard use.

Staigreen



Shady Place

PRICES

Following delivered Anywhere in the United States when cash accompanies the order

Staigreen Lawn Mixture: for carpet-like turf

Lb.	2½ lbs.	5 lbs.	12½ lbs.	25 lbs.	100 lbs.
$0.60	$1.40	$2.75	$6.50	$12.00	$47.50

	Qt.	4 qts.	8 qts.	Bus.	10 bus.
Shady Place Lawn Seed	$0.50	$1.65	$3.00	$10.00	$97.50
Tennis Court Grass Seed	.50	1.75	3.25	12.00	115.00
Terrace Sod Lawn Seed	.50	1.75	3.25	12.00	115.00

Quantity to Order

One pound sows 20 ft. x 20 ft. (400 sq. ft.) 100 pounds sow 1 acr
One quart sows 15 ft. x 15 ft. (225 sq. ft.) 4 bushels sow 1 acre

Double these quantities when turf is needed quickly

To Repair Turf that is worn and jaded, use one-half these quantities

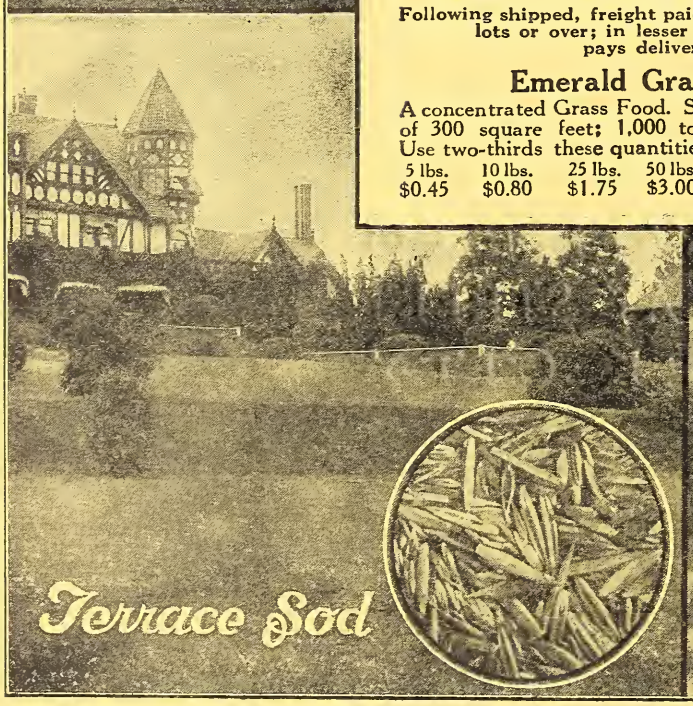
	Oz.	¼lb.	Lb.	5 lbs.	100 lbs.
White Lawn Clover	$0.10	$0.25	$0.75	$3.25	$62.50

Following shipped, freight paid to your station, in 100-lb. lots or over; in lesser quantities purchaser pays delivery charges

Emerald Grass Fertilizer

A concentrated Grass Food. Scatter 10 pounds on an area of 300 square feet; 1,000 to 1,500 pounds to the acre. Use two-thirds these quantities for renovating.

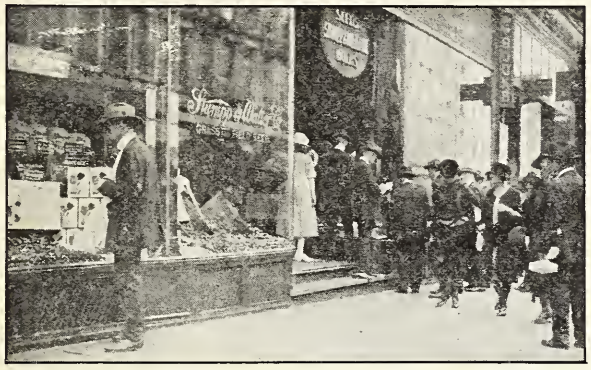
5 lbs.	10 lbs.	25 lbs.	50 lbs.	100 lbs.	500 lbs.	Ton
$0.45	$0.80	$1.75	$3.00	$5.50	$22.00	$75.00



Terrace Sod

GREETINGS

Twenty-Sixth Year of Seed Service



One of the principal features of our business is to keep always a display of seasonable goods at our spacious stores, and we invite our patrons who come to New York to visit our establishment. You will find our people never too busy to talk with you about your garden needs.

ON the threshold of our second quarter-century of seed service, our feeling is one of gratitude to those thousands of friends with whom we have had business dealings, many having traded with us continuously for the greater part of the twenty-five-year period. Thanks to their loyal support, we have been able to report successively through the years a gradual and continued increase in business.

We cannot but recognize that continued progress is founded only on confidence, and confidence is created and fostered only by efficient service on our part—the furnishing of seeds, bulbs, and plants of high quality, their strict dependability insuring the best possible results.

You cannot *see* the quality in seeds: it is by results only that our merchandise can be judged; our wares are the raw materials, as it were; they are not purchased for immediate use but for the results that, with proper care and in the fullness of time, may reasonably be expected of them.

Every season gives us the opportunity of greeting new friends and customers, and it is our pleasure to take this occasion to assure them that our methods involve the most minute care in the production of seeds, a never-ending process of cleaning, recleaning, grading, and testing, with an eye watchful for and work ever directed toward the production of improved varieties, varieties which show an advance in the quality of produce and increase in crop.

We invite the business of our new friends, and we welcome their orders, however small, for a trial alone gives us the opportunity of demonstrating to them that individual and interested attention which has ever been the keynote of our business.

TERMS

SPECIAL FREE DELIVERY. We will deliver Garden Seeds and Bulbs listed in our catalogue anywhere in the United States when cash accompanies your order, by mail, express, or freight, at our option, to your town or city. On Field Seeds, Implements, Fertilizers, Insecticides, Plants, and Potatoes, we do not pay mail, express, or freight charges, and we reserve the right to charge a proportion of the cost of mailing Peas, Beans, and Corn if your order consists only of these sorts.

Packing.—We make no charges for cases or packing, only for cotton and burlap bags; these we invoice at cost and make full allowance when returned, prepaid, in good condition.

Remittances should be made by Draft on Bank, Post-Office Order, Registered Letter, or Express Money Order. Small sums may be sent in postage stamps. We draw attention to the necessity for particular care in having name, post-office, county and state distinctly written; we are in receipt of many orders deficient in these important particulars. Charge accounts are readily opened to all persons of approved credit.

Non-Warranty.—We, Stumpp & Walter Co., give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs, or plants we send out, and will not be responsible for the crop.

As bearing on the above, the following remarks, taken from Bulletin No. 1232, issued October, 1921, by the U. S. Department of Agriculture, are of interest. **"Without attempting to discuss the arguments for the seedsman's disclaimer pro and con, the fact remains that reputable seedsmen stand back of their seeds and do not knowingly and wilfully sell seeds that are unfit for planting purposes."**

All claims must be made within 5 days after receipt of goods

GEORGE G. STUMPP, *President*
JULIAN H. WALTER, *Treasurer*

Stumpp & Walter Co

THOMAS F. KEARNEY, *Asst. Treas.*
WILLIAM A. SPERLING, *Secretary*

30-32 BARCLAY STREET : NEW YORK CITY

Phone Cortlandt 3211 3212 1231 3260

Baltimore, Md., Branch:
208-210 N. Eutaw Street

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Newest and Best Vegetables

Varieties of Recent Introduction and Special Strains of Types that are Standard

Magpie Bush Bean

Magpie is of European origin and is so named from the speckled black-and-white seeds of the variety. The plant is of very strong growth, stocky, and very resistant to rust. The pods are long, meaty, and of the highest quality. Magpie is an enormous producer. Although largely grown as an outdoor sort it is suitable also for culture under glass. A great favorite on the estates of Westchester County, Long Island, and Connecticut. **Pkt. 25 cts., ½lb. 40 cts., lb. 75 cts., 2 lbs. $1.40, 5 lbs. $3.40, 15 lbs. $10.**

Early Wonder Beet

A variety which has gained wide popularity among market-gardeners, and one which the amateur may also grow with every confidence. It may be sown early, and it matures very rapidly. It is so uniform in growth that the crop can be lifted practically at one time, yielding the land early and quickly for the second crop. The root is nearly globular in shape, slightly flattened. The leaves are of medium size, and the color of the flesh is deep blood red. **Pkt. 15 cts., oz. 30 cts., ¼lb. $1, lb. $3.50.**

Copenhagen Market Cabbage

The best of all early Cabbages. It stands longer without bursting than other early sorts, and, in spite of the speed with which it reaches maturity, is superior in quality to any of the late varieties. The stem is short and the head round and solid, and if left until fully mature each Cabbage frequently weighs from 8 to 10 pounds. The leaves are small, compact, and close to the head, so it will stand close planting. The inside is fine-grained, tender, and pure white. Copenhagen Market is a leader for the commercial grower. **Pkt. 20 cts., ¼oz. 35 cts., ½oz. 60 cts., oz. $1.10, ¼lb. $4.**

Early Cone Savoy Cabbage

In this type the firm, close, solid heart is of a conical shape, corresponding in smooth Cabbages to Early Jersey Wakefield. The leaves are heavily and deeply corrugated; in color they are a rich dark green, the center blanching to a creamy white. Of all Savoys, this is the most refined in flavor. **Pkt. 20 cts., ¼oz. 35c., ½oz. 60 cts., oz. $1.10, ¼lb. $4.**

Three Exhibition Carrots

The following are special stocks, chosen after rigid tests for their fine exhibition quality; they are commended particularly to the private gardener who wishes to take premier honors on the exhibition board; the commercial grower, too, will find them profitable, and to the amateur they will appeal as being of the best possible cooking quality.

S. & W. CO.'S EXHIBITION CHANTENAY. Uniformly smooth and handsome.

S. & W. CO.'S EXHIBITION DANVERS. A gilt-edge stock.

S. & W. CO.'S MELTING MARROW. Cylindrical, practically coreless, and of wonderful butter quality.

The three varieties, each, pkt. 15 cts., oz. 40 cts., ¼lb. $1.25, lb. $4.

Early Giant Bush Lima Bean

A quick-growing variety. The short period in which this Bean matures enables it to be *grown for succession*, sowings being made from May 15 to July 10 in the neighborhood of New York. Other varieties of Lima Beans take so long to mature that more than one seeding is barely practicable with them. The flavor of this variety is particularly refined, and the fine, luscious Beans, which are large, thick, and flat are produced in remarkable quantity. We suggest that our patrons give this variety a trial. **Pkt. 15 cts., ½lb. 35 cts., lb. 60 cts., 2 lbs. $1.15, 5 lbs. $2.85, 15 lbs. $8.45.**

Zenith Red Cabbage

We consider this a great improvement on all other types of Red Cabbage. The heads are of medium size and very solid; the leaves are of fine texture with thin, light ribs, the outer leaves being few and small. In color, Zenith is particularly dark, and the variety is the best we know for home pickling or for market. **Pkt. 20 cts., ¼oz. 35 cts., ½oz. 60 cts., oz. $1, ¼lb. $3.50.**

S. & W. Co.'s Golden Plume Celery

Golden Plume Celery fills a want that both amateur and professional gardeners have long felt. It is a much-improved form of Golden Self-blanching, and the improvements are (*a*) superior eating quality, (*b*) wonderful golden color, (*c*) marked resistance to blight and rust, (*d*) earlier maturity, (*e*) superior keeping qualities, (*f*) increased size. It possesses a fine, nut-like flavor, and is handsome in appearance. We offer the raiser's original strain. **Pkt. 25 cts., ¼oz. $2.50, ½oz. $4, oz. $7.50.**

Earligreen Celery

Earligreen is the finest, earliest green Celery that we know, and is a fitting counterpart to Golden Plume. Sown in February and March, and planted out in May, we have seen this variety offered in the New York market by mid-August, fetching high prices in the short period after the supply of southern Celery has ceased and before local Celery comes into the market. The plant is surprisingly large for an earliest early sort; although it is stocky in habit, it is not so markedly so as Golden Self-blanching and Golden Plume. The outer leaves are green, and the very full heart is pure white, brittle, and of the most delicious flavor. Earligreen is like Golden Plume in that both are originations of leading growers, both of whom have been, for many years, supplying the New York consumer with table Celery. It is of sterling merit, and we predict a fine future for it. For this first year the supply of seed is strictly limited, and we offer only in packets. **Pkt. 25 cts., ¼oz. $2.50, ½oz. $4, oz. $7.50.**

S. & W. Co.'s Midget Sweet Corn, showing actual size of the ear. This photograph was taken after the ear of corn was dried for seed purposes

S. & W. Co.'s Midget Sweet Corn

A miniature Sweet Corn that is markedly suitable for the small garden, city back yard, window-box, or for growth in pots, and adapted for culture under glass. The tiny plant grows no taller than about 30 inches, and the ears are only 3 to 4 inches long, but from two to five of these petite ears are produced on a single stalk. The ears are of fine quality—the kernels white, meaty, and very sweet, while the cob is small. The ease with which these tiny ears may be handled in the kitchen is alone sufficient to commend it to the housewife, while, in addition, the quality is superior to a degree. A decided novelty. **Pkt. (50 seeds) 50 cts., 12 pkts. $5.**

De Lue's Golden Giant Corn

One of the parents of this fine variety is Golden Bantam, but Golden Giant more than retains the sweetness of its ancestor. It is quite as early, averages more ears to the stalk, and the ear has three times the bulk and weight, averaging 8 inches in length. Golden Giant has a 12- to 20-rowed ear against the 8-rowed ear of Bantam. The plant has the same medium-dwarf habit of Bantam, and, on account of its heavy yield, it is the one Corn for the gardener who looks for the largest production of the best quality Corn on the smallest area of ground. **Pkt. 15 cts., ½lb. 30 cts., lb. 50 cts., 2 lbs. 95 cts., 5 lbs. $2.35, 15 lbs. $6.95.**

Early Malcolm Corn

This originated at the Central Experimental Farms of the Canadian Government, being bred from Malakoff, an extremely early Russian variety. It is a Sweet Corn with a wrinkled kernel, matures in 55 days, which is approximately two weeks earlier than Golden Bantam. It is grown on stalks about 3½ feet high and the ears are about 15 inches above ground, averaging 6 inches in length and containing eight to ten straight rows. The variety is high in sugar content and is delicious to the taste. Early Malcolm enables you to have Corn on the table two weeks ahead of your neighbor. **Pkt. 15c., ½lb. 30 cts., lb. 50 cts., 2 lbs. 95 cts., 5 lbs. $2.35, 15 lbs. $6.95.**

New York or Wonderful Lettuce

Possibly the largest Lettuce in cultivation. It is so distinct that, with its crisply curled leaves, very dark color, and remarkable size, a row of New York frequently puzzles even the experienced grower if unacquainted with this variety—at first glance he is likely to wonder what kind of a plant he is looking at. New York is a sure-heading variety, suitable both for spring and late summer planting; the big, compact, white heads are of the best possible quality. **Pkt. 10 cts., oz. 30 cts., ¼lb. $1, lb. $3.50.**

"10/25" Salmon Tint Muskmelon

The Rocky Ford Muskmelon has been improved under the direction of Professor Blinn of the Colorado Experiment Station, and "10/25" is the best yet. The fruit is heavily and evenly netted, very uniform in size, rust-resisting and early; the flesh is a rich gold in the center, shading out to emerald-green near the rind. The flavor is highly aromatic and pleasing to a degree. **Pkt. 15 cts., oz. 40 cts., ¼lb. $1.25, lb. $4.**

Supreme Muskmelon

A truly magnificent and distinct melon, very large in size and of the finest quality, originated by Mr. George Ashworth, Locust Valley, N. Y., an expert gardener, who called it the Giant Emerald Gem, being a cross between Emerald Gem and Golden Queen. Supreme Muskmelon grows to weigh fifteen pounds or more under good cultivation. Its color is a deep emerald-green outside, with more or less netting, while the flesh is a fine deep salmon of unusual thickness; its quality is like that of Emerald Gem when at its best. It has a rich and most delicious flavor, tender and melting, with absolutely no hard substance; it is also highly aromatic. **Pkt. 25 cts., ½oz. 75 cts., oz. $1.25.**

Gigantic Gibraltar Exhibition Onion

By far the most dependable strain of the giant type of Onion. It is somewhat similar in appearance to Prizetaker, except that it is lighter in color, and, while larger in size, is a splendid keeper and of decidedly mild flavor. In some cases the Onions have weighed 3½ pounds, and are quite the largest we have ever seen. Comparative tests show that from an exhibition standpoint its longer period of growing warrants a trial against the favorite Ailsa Craig. To grow these extra-large exhibition specimens, seeds are generally sown early in February, in a hotbed or greenhouse, and the young seedlings are transplanted. **Pkt. 15c., ½oz. 35c., oz. 60c., ¼lb. $2, lb. $7.**

S. & W. Co.'s Exhibition Curled Parsley

This Parsley is remarkable for its fine leaves and close habit. In flavor it is superior to that of any known variety, and it is very tender. The seed offered has been saved from exhibition plants only. **Pkt. 25 cts., 5 pkts. $1.**

S. & W. Co.'s Selected Exhibition Parsnip

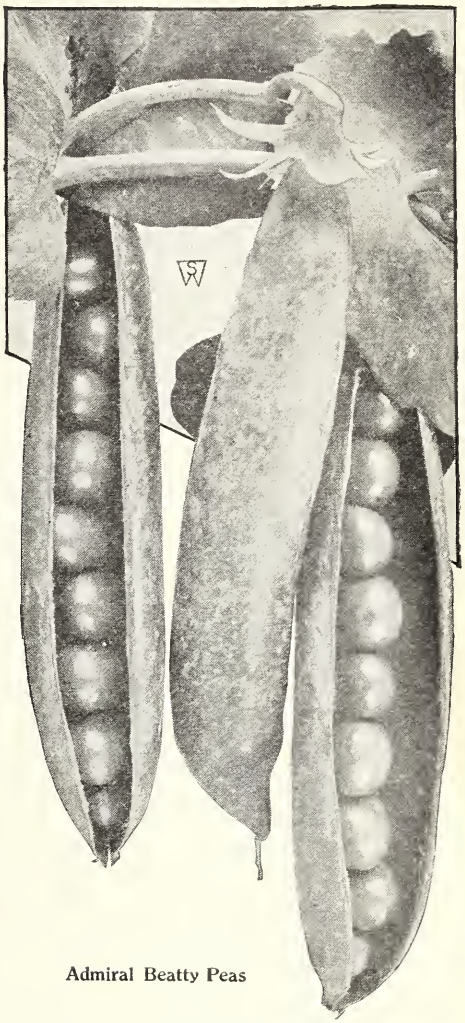
A splendid Parsnip for exhibition purposes. This variety, grown by a very successful exhibitor, was pronounced quite the best of five varieties sent for exhibition purposes. **Pkt. 25 cts., 5 pkts. $1.**

Three Wonderful Peas

Eight Weeks. A remarkable super-first-early round-seeded Pea, growing 18 inches high. It may be sown on a warm, sheltered border at a time when snow is still present in other parts of the garden; the result will be Peas *weeks* before those obtained from the main seedings with standard varieties. **Pkt. 15 cts., ½lb. 35 cts., lb. 60 cts., 2 lbs. $1.15, 5 lbs. $2.85, 15 lbs. $8.45.**

Market Surprise. On vines 3 feet tall, Market Surprise bears 3½-inch pods in great quantities, within 60 days from date of sowing. It is thus but four days later than the best Extra-Early, while the pods contain on an average two more Peas, and the Peas are larger. They are of truly remarkable sweetness for so early a sort. Home-gardeners, as well as truckers, will find this new sort a big surprise in every way. **Pkt. 15 cts., ½lb. 35 cts., lb. 60 cts., 2 lbs. $1.15, 5 lbs. $2.85, 15 lbs. $8.45.**

Admiral Beatty. The parents of this splendid new English variety are Gradus and Alderman, and it is intermediate between them both in habit and season. It is 3½ feet high, and the Peas are fully wrinkled and "marrowfat;" their cooking quality is excellent. The pods are long and pointed, contain nine or ten Peas, and are produced in great abundance. **Pkt. 25 cts., ½lb. 40 cts., lb. 75 cts., 2 lbs. $1.40, 5 lbs. $3.25, 15 lbs. $9.50.**



Admiral Beatty Peas

Spinach, S. & W. Co.'s Emerald Standing

A very large and vigorous type of compact, flat, spreading growth. The leaves are large, thick, slightly crumpled, very fleshy, and carried on long stems. The color is a very dark green. The most important point about this Spinach, however, is that *it stands fully one month longer than any other variety* before bolting to seed. In spite of this, it is quite early to mature and is ready for cutting almost as soon as Bloomsdale. We predict a heavy demand for Emerald Standing by truckers, market gardeners, private gardeners, and amateurs. Seed is obtainable only in limited quantity. **Pkt. 15 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

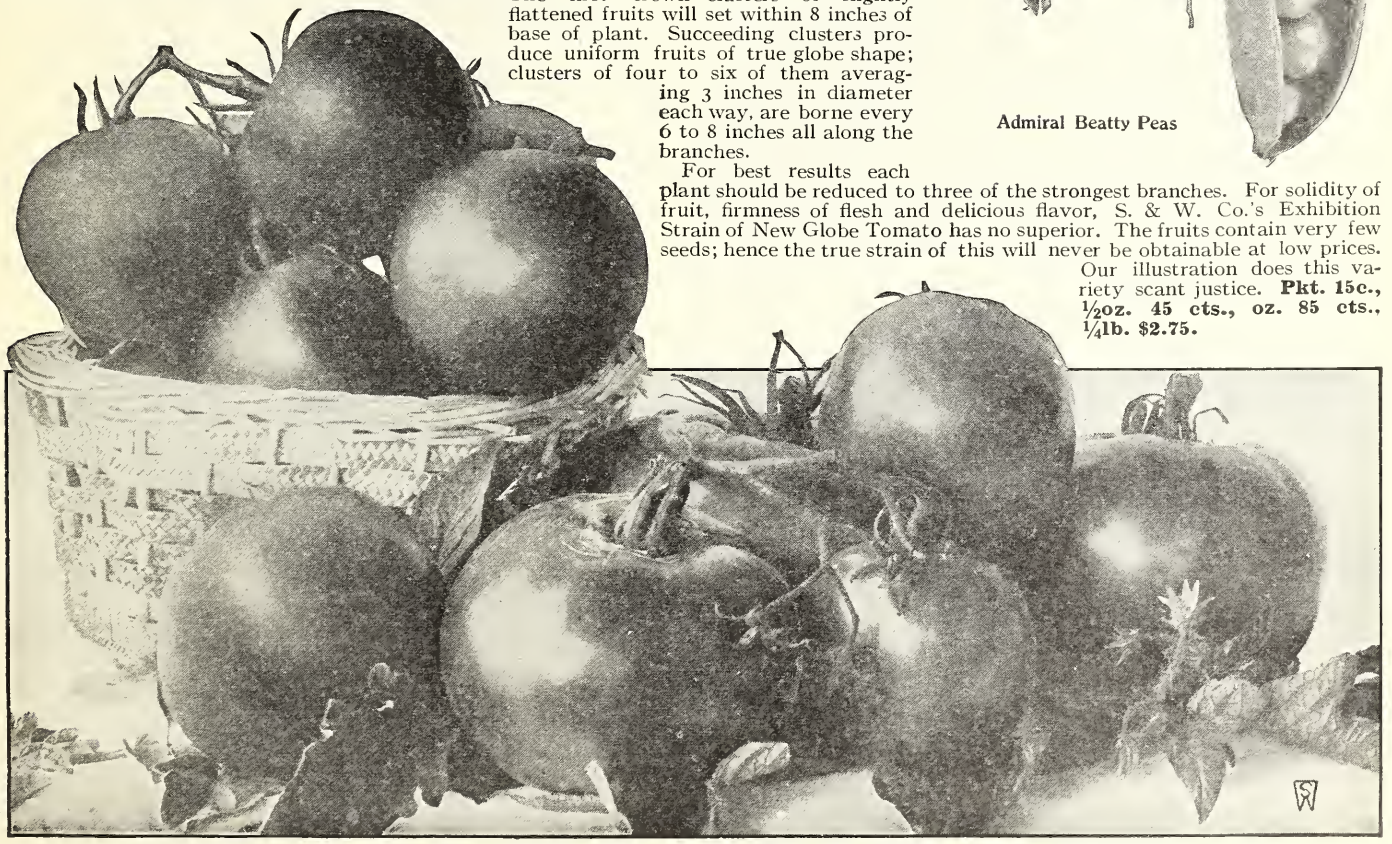
S. & W. Co.'s Exhibition Strain of New Globe Tomato

Unquestionably the highest standard of perfection yet attained in a Tomato. If you want to limit yourself to any one sort, select this one and results in the Tomato patch next summer will convince you of the wisdom of your choice.

Our strain of New Globe is uniformly early. Within 10 days after Earliana, or June Pink, the first of its deep rose-colored fruits become ripe. From then on, until frost kills the last flowers, this strain of Globe bears magnificent crops of fruits.

The plants are extremely prolific, especially if trained to stakes and pruned. The first crown clusters of slightly flattened fruits will set within 8 inches of base of plant. Succeeding clusters produce uniform fruits of true globe shape; clusters of four to six of them averaging 3 inches in diameter each way, are borne every 6 to 8 inches all along the branches.

For best results each plant should be reduced to three of the strongest branches. For solidity of fruit, firmness of flesh and delicious flavor, S. & W. Co.'s Exhibition Strain of New Globe Tomato has no superior. The fruits contain very few seeds; hence the true strain of this will never be obtainable at low prices. Our illustration does this variety scant justice. **Pkt. 15c., ½oz. 45 cts., oz. 85 cts., ¼lb. $2.75.**



S. & W. Co.'s Exhibition Strain of New Globe. A Tomato which, for solidity of fruit, firmness of flesh and delicious flavor, has no superior

Stumpp & Walter Co.'s Vegetable Seeds

It has always been our endeavor to list only such sorts of Vegetable Seeds as, from our tests, we have found to be of superior merit; and, while we have in many instances not listed certain varieties, which have been struck out on account of being out of date, we have in every instance listed a superior sort which we can recommend as being more satisfactory both for the market and the home garden.

WE STRONGLY RECOMMEND ALL VARIETIES LISTED IN BOLD TYPE

ASPARAGUS ROOTS

The demand for Asparagus as an early spring vegetable is becoming quite popular. It is generally thought that it requires too much space for growing, but a plot 6 feet wide and 50 feet long will be sufficient to plant 100 of our Mammoth roots, sufficient for an ordinary family. Roots of this age should be planted, as they will yield Asparagus quickly.

CULTURE.—Dig a trench, 1½ feet deep and 1 foot wide, and fill in about 4 inches with well-rotted manure, tread down firmly. On this put about 5 inches of good, rich soil, and then lay the roots in, about 18 ins. apart, taking care to spread well, having the crown in an upright position. Cover to within 4 inches of the top of the trench and, as the plants grow, gradually fill the trench to the surface. For spacing between the rows allow 18 ins.

Pedigreed Washington. Originally developed by the U. S. Department of Agriculture, further selected and improved. It is rust-resistant, particularly vigorous, and of wonderful quality. The shoots are large, straight, *dark green* in color and with a heavy purple over-tone; the tight, firm tips do not begin to open out until well out of the ground. Pedigreed Washington Asparagus stands ahead of all other varieties as a standard for the home- or market-garden. **Extra-choice roots, $5 per 100; $45 per 1,000.**

CONOVER'S COLOSSAL. A mammoth bright green sort, the tips of which are often tinged purple. Very tender and of good quality—quite the best of the older standard kinds.

	100	1,000
Extra-choice Roots	$2 50	$20 00
Mammoth Roots	3 50	30 00

ASPARAGUS SEED

One ounce will plant about 50 feet of drill

PEDIGREED WASHINGTON. One of the difficulties in growing Asparagus is the damage often done by rust. Dusting with powdered sulphur when the plants are wet with dew is good practice, and spraying with bordeaux mixture is also to be recommended. The best procedure, however, is to plant only rust-resistant varieties, and **Pedigreed Washington** is the most highly resistant type we know. Read the description above. Seed, pkt. 25 cts., oz. 50 cts., ¼lb. $1.50, lb. $5.

CONOVER'S COLOSSAL. The standard variety. Reliable. Seed, pkt. 10 cts., oz. 15 cts., ¼lb. 35 cts., lb. $1.

NOTE.—For the Asparagus beetle, spray with arsenate of lead, offered on page 173.

ARTICHOKE

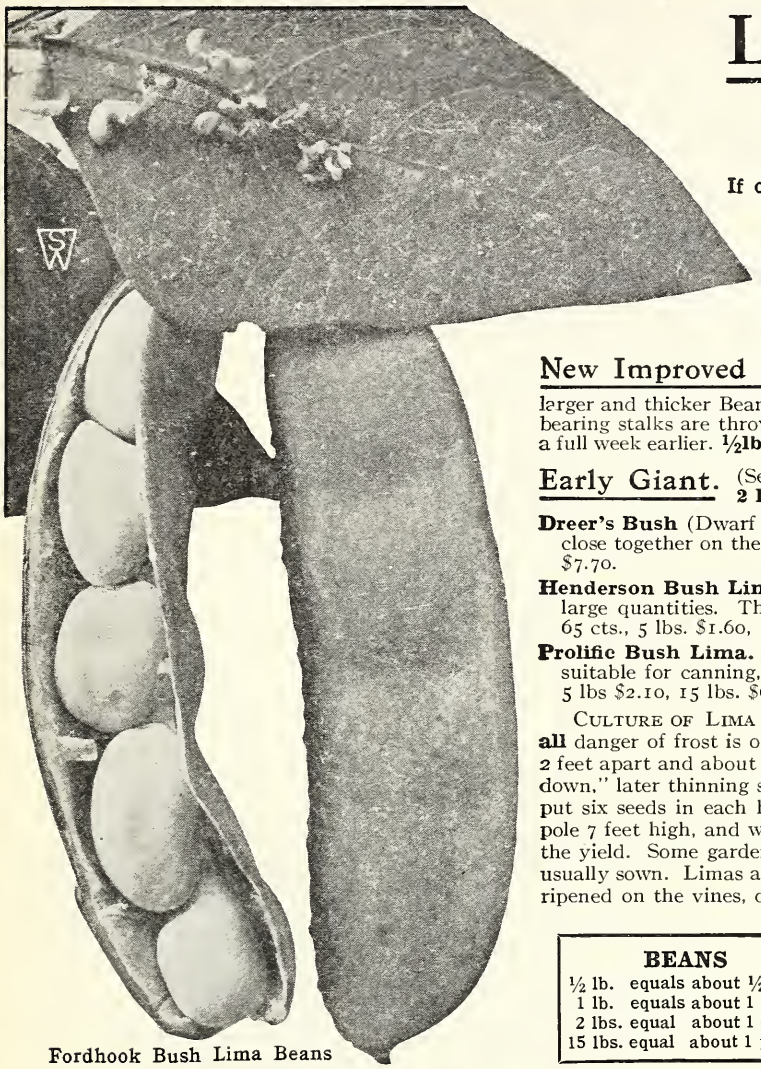
One ounce will produce 500 plants

The scales and bottom of the flower-heads are eaten, either boiled or raw, as a salad. The young suckers are sometimes tied together and blanched and served in the same manner as asparagus. The plants thrive best in deep, rich soil where the water will not lodge in winter-time. Sow seeds indoors, and pot up similar to tomatoes, setting out in May, in rows 3 feet apart, leaving 2 to 3 feet between the plants. Some flower-buds may be had the first year. Cover with ashes and leaves in winter. Usually bears best the second year.

Large Green Globe. The best variety. Pkt. 25 cts., ½oz. 90 cts., oz. $1.50, ¼lb. $5.

ARTICHOKE ROOTS

Jerusalem Artichoke. Distinct from the Globe, and propagated by and for the tubers. Plant in rows, 3 feet apart and 1 foot apart in the row, and cultivate occasionally. Allow the tubers to remain in the ground until needed. Used for feeding stock or pickling, or may be served boiled, like new potatoes. Qt. 35 cts., pk. $2.



Fordhook Bush Lima Beans

LIMA BEANS

(Dwarf Bush)

One pound will plant 50 to 100 feet of drill

If ordered alone add for mailing, 5 cts. per ½pound, 10 cts. per pound, and 15 cts. per 2 pounds to the prices listed

Fordhook. A form of the popular Challenger or Potato Lima, and earlier. Both pods and Beans are almost twice the size of the Kumerle or Dreer's Bush Lima. Pods measure 4 to 5 inches, frequently containing 4 fine Beans of the finest flavor. **Pkt. 10 cts., ½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**

New Improved Bush Lima. Similar to Burpee's Bush Lima except that pods are larger in size and are well filled with larger and thicker Beans. A far greater producer; growth more vigorous; the blossom-bearing stalks are thrown well out of the foliage, and the Beans are ready for picking a full week earlier. **½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**

Early Giant. (See Novelties, page 2.) **Pkt. 15 cts., ½lb. 35 cts., lb. 60 cts., 2 lbs. $1.15, 5 lbs. $2.85, 15 lbs. $8.45.**

Dreer's Bush (Dwarf Potato Lima). A thick, almost round Bean, the pods growing close together on the vines. ½lb. 30 cts., lb. 55 cts., 2 lbs. $1.05, 5 lbs. $2.60, 15 lbs. $7.70.

Henderson Bush Lima. Both pods and Beans are small, but they are produced in large quantities. The standard Lima for canning. ½lb. 20 cts., lb. 35 cts., 2 lbs. 65 cts., 5 lbs. $1.60, 15 lbs. $4.70.

Prolific Bush Lima. Of the same type as Henderson, equally prolific and equally suitable for canning, but decidedly larger. ½lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs $2.10, 15 lbs. $6.20.

CULTURE OF LIMA BEANS.—Don't waste your seed by sowing Lima Beans before **all** danger of frost is over and the soil is thoroughly warm. Sow **Bush sorts** in rows 2 feet apart and about 3 inches deep, putting the Beans 2 inches apart in the row "eye down," later thinning so that the plants stand 6 to 8 inches apart. For **Pole varieties** put six seeds in each hill, arranging the hills 3 feet apart each way. They require a pole 7 feet high, and when the vines have reached the top, pinch them and so increase the yield. Some gardeners plant under glass and transplant about the time seeds are usually sown. Limas always do best on a nice, rich, loamy soil. Surplus stock may be ripened on the vines, dried and kept for winter use.

BEANS	
½ lb.	equals about ½pint
1 lb.	equals about 1 pint
2 lbs.	equal about 1 quart
15 lbs.	equal about 1 peck

LIMA BEANS (Pole)

One pound will plant 50 hills

If ordered alone add for mailing, 5c. per ½pound, 10c. per pound, and 15c. per 2 pounds to the prices listed

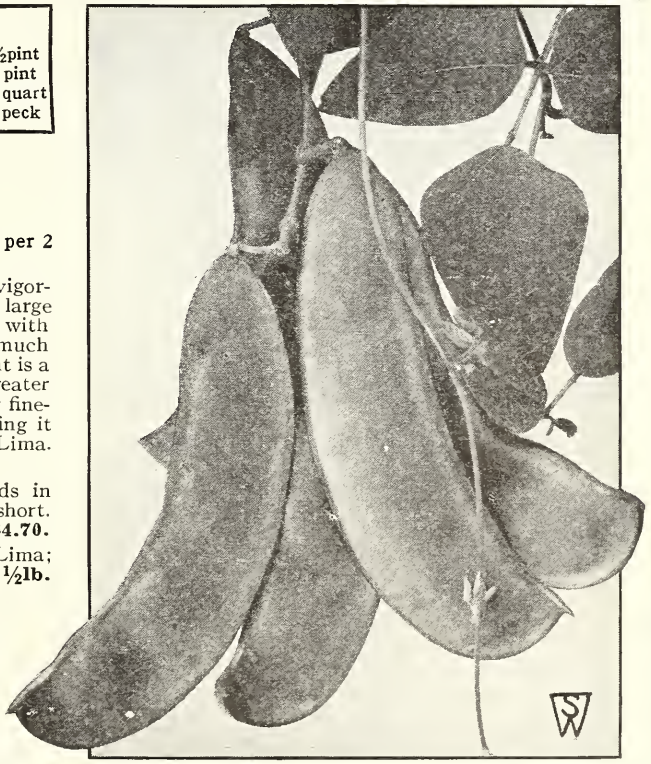
S. & W. Co.'s Green-seeded. The vine is very strong, of vigorous growth, with many large runners or branches, producing a great many fine pods which are closely filled with large Beans, a large proportion containing four. This is a broad-seeded Bean, much nearer to having every Bean perfect than any other Pole Lima. The green tint is a distinctive feature of this Bean, for it retains this tint in the dry state to a greater extent than usual, which indicates the fine qualities which it possesses, being fine-flavored and more tender when cooked than white-seeded Beans, and making it more pleasing to gardeners and housekeepers. It is the most perfect Pole Lima. **½lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $2.10, 15 lbs. $6.25.**

Early Leviathan. The earliest variety of Pole Lima; produces pods in clusters. A splendid variety where the season is short. **Pkt. 10 cts., ½lb. 20 cts., lb. 35 cts., 2 lbs. 65 cts., 5 lbs. $1.60, 15 lbs. $4.70.**

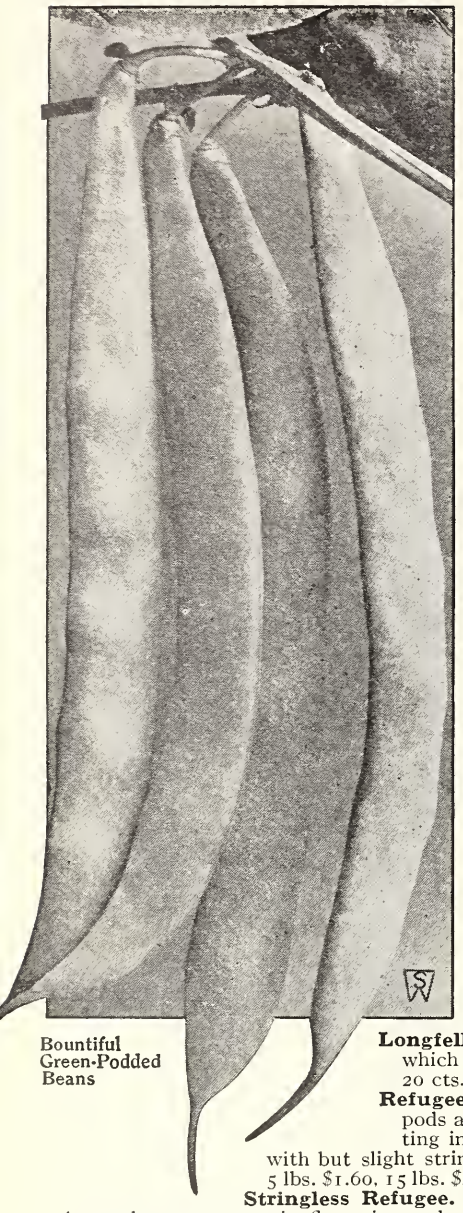
Challenger, or Potato. Early and more prolific than the large Lima; a small Bean of decidedly excellent flavor. **½lb. 20 cts., lb. 35 cts., 2 lbs. 65 cts., 5 lbs. $1.60, 15 lbs. $4.70.**

Ford's Mammoth. Very large pods, frequently measuring 9 inches long; Beans flat and large; fine for the home garden; productive and of good flavor. **½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**

SPECIAL FREE DELIVERY. We deliver assorted vegetable and flower seeds anywhere in the United States when cash accompanies your order; please, however, add postage when peas, beans and corn (which are heavy in proportion to their value), are ordered alone.



S. & W. Co.'s Green-seeded Pole Lima Beans



Bountiful Green-Podded Beans

DWARF or BUSH BEANS

One pound will plant 100 feet of drill

CULTURE.—Plant as soon as danger of frost is over, placing the seeds 2 to 3 inches apart in drills and about 2½ inches deep. The rows should be about 2½ feet apart, and the soil slightly hilled, to insure good drainage and keep the Beans from touching the ground. Most Beans should be picked when about 4 inches long. Frequent pickings insure a more prolonged bearing season. Avoid jerking the plant, as this frequently disturbs young feeding roots. Use the finger-nails to sever the stems. Do not pick when bushes are wet, as this may cause blight and rust. For succession in the home-garden plant 30 feet of row every other week up to August 1.

GREEN-PODDED BEANS

If ordered alone add for mailing, 5c. per ½pound, 10c. per pound, and 15c. per 2 pounds

Bountiful. To this Bean belongs the distinction of being one of the best **flat, Green-Podded Bush Beans;** very prolific and a continuous bearer from early spring to late fall. It is tender and of delicious flavor. Is a entirely stringless as the breeder has been able to make a flat, green-podded Bean. Its pods contain a little more fiber than Stringless Green-Pod of like age, but they average large and are entirely stringless until they become longer than 5 inches. One of the earliest Bush Beans. **Pkt. 10 cts., ½lb. 20 cts., lb. 30 cts., 2 lbs. 55 cts., 5 lbs. $1.35, 15 lbs. $3.95.**

Stringless Green-Pod. This Bean remains among the very best first-early round-podded Bush Beans. A very free bearer; entirely stringless; averages 5 inches long and is slightly curved. A handsome sort, borne on a healthy plant which stands dry weather well. **½lb. 20 cts., lb. 30 cts., 2 lbs. 50 cts., 5 lbs. $1.15, 15 lbs. $3.25.**

Giant Stringless Green-Pod. Pods greatly resemble those of Stringless Green-Pod Fully an inch longer in size and a trifle earlier. A variety that is largely grown for the market on account of its size and splendid shape. Splendid sort for succession when planted with Stringless Green-Pod. **½lb. 20c., lb. 30c., 2 lbs. 55c., 5 lbs. $1.35, 15 lbs. $3.95.**

Black Valentine. A Bean which has been planted extensively in the South on account of its heat-resisting qualities. Matures early, producing long, round, straight pods, which are tender when quite young. Perfects the crop all at once, hence valuable as a market sort. **Pkt. 10c., ½lb. 20 cts., lb. 30 cts., 2 lbs. 55 cts., 5 lbs. $1.35, 15 lbs. $3.95.**

Early Red Valentine. This variety is valuable on account of its earliness. Pods very fleshy, round and saddle-backed, with slight strings. Bushes grow uniformly about 15 inches in height and produce a large crop. **½lb. 20 cts., lb. 30 cts., 2 lbs. 55 cts., 5 lbs. $1.35, 15 lbs. $3.95.**

Dwarf Horticultural. Pods are medium in length, slightly curved, and when nearly developed are splashed with bright red on a yellow skin. The green-shelled Beans are of fair size, tender, and fine flavored. ½lb. 20 cts., lb. 30 cts., 2 lbs. 55 cts., 5 lbs. $1.35, 15 lbs. $3.95.

Longfellow. Extra-early, producing long, round, green pods which are tender, brittle, and stringless when young. ½lb. 20 cts., lb. 35 cts., 2 lbs. 65 cts., 5 lbs. $1.60, 15 lbs. $4.70.

Refugee, or **1,000-to-1.** One of the latest Beans. The pods are nearly round, light green, 5 inches long, terminating in a slender point; fleshy, brittle, and mild in flavor, with but slight strings. Pkt. 10 cts., ½lb. 20 cts., lb. 35 cts., 2 lbs. 65 cts., 5 lbs. $1.60, 15 lbs. $4.70.

Stringless Refugee. The most satisfactory all-round Bean we know of. A very heavy cropper, its flavor is wonderful and it is absolutely stringless. Valuable for immediate use, for pickling or for canning. Pkt. 15 cts., ½lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $2.10, 15 lbs. $6.20.

Magpie. (See Novelties, page 2.) Pkt. 25 cts., ½lb. 40 cts., lb. 75 cts., 2 lbs. $1.40, 5 lbs. $3.40, 15 lbs. $10.

NOTE.—The American seed trade generally has adopted the cental system of packing Beans, Corn, and Peas, and we therefore offer them by weight instead of measure. One pound of Beans is equal to one pint, two pounds to one quart; the average weight of a bushel of Beans is 60 pounds.

BEANS FOR DRY SHELLING

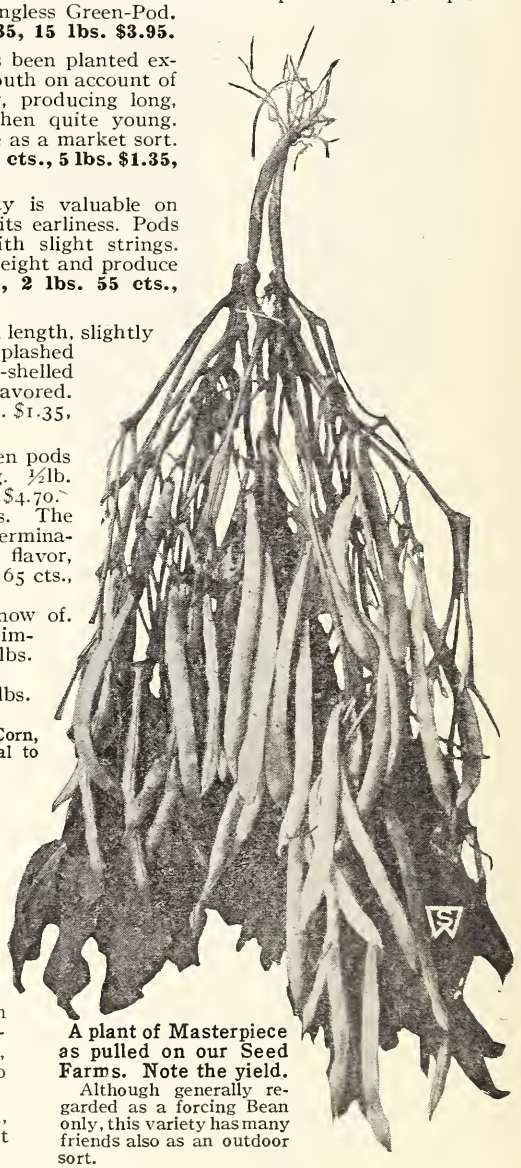
Pea, or **Navy.** A snowy white variety of uniform small size. The plants grow upright and bear the pods well off the ground. A field Bean of which large acreages are grown. ½lb. 20c., lb. 30 cts., 2 lbs. 55 cts., 5 lbs. $1.35, 15 lbs. $3.95.

Boston Marrow. }
Red Kidney. } ½lb. 20 cts., lb. 30 cts., 2 lbs. 55 cts., 5 lbs. $1.35, 15 lbs. $3.95.

FORCING BEANS

Masterpiece. We offer the true strain of this fine English variety, carefully grown by experts under our supervision. Masterpiece is of splendid constitution, a quick grower and very prolific, the pods attaining a length of over 7 inches, straight, tender, meaty and stringless. As a quick grower under glass, Masterpiece is difficult to beat. Bean thick-flat. **½lb. 55 cts., lb. $1, 2 lbs. $1.90, 5 lbs. $4.75, 15 lbs. $14.15.**

S. & W. Co.'s Wonder. Of fine color and refined flavor. The pods are round, average 6 inches in length, and they are borne in great abundance. **½lb. 35 cts., lb. 60 cts., 2 lbs. $1.15, 5 lbs. $2.85, 15 lbs. $8.45.**



A plant of Masterpiece as pulled on our Seed Farms. Note the yield. Although generally regarded as a forcing Bean only, this variety has many friends also as an outdoor sort.

DWARF or BUSH WAX-PODDED BEANS

One pound will plant 100 feet of drill

If ordered alone add for mailing, 5 cts. per ½lb., 10 cts. per lb., 15 cts. per 2 lbs.

Sure-Crop Stringless Wax. The plant grows to a large size and, having a strong, thick stem, stands up well even during a long season of stormy weather, thus protecting the pods from dirt and dampness. It is very productive, bearing in great abundance large, handsome, golden yellow pods which are stringless and tender at all stages of development. Being very hardy, the seed may be planted early. **Sure-Crop** is more rust-proof and will stand a longer season of damp, wet weather than any other Stringless Wax Bean. **½lb. 20 cts., lb. 35 cts., 2 lbs. 65 cts., 5 lbs. $1.60, 15 lbs. $4.70.**

Hardy Wax. One of the best round-podded stringless Wax Beans ever evolved. The plants have thick, leathery leaves which resist cold, blight and plant diseases to a marked degree. Within 65 or 70 days of planting, Hardy Wax bears immense crops of slightly curved deep yellow pods. Remains in bearing for a remarkably long period **Pkt. 15 cts., ½lb. 30 cts., lb. 55 cts., 2 lbs. $1.05, 5 lbs. $2.60, 15 lbs. $7.70.**

Brittle Wax. Without a doubt the earliest of all Wax Beans; also a great cropper. The bushes are remarkably hardy and extremely prolific, while the pods are fleshy and entirely stringless, often measuring 4½ to 6 inches long. They are broad and solid, tender, brittle and entirely stringless at all stages of growth The pods have white seeds showing only a small black dot at the eye and where a surplus is allowed to ripen fully they make excellent Shell Beans. **½lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $2.10, 15 lbs. $6.25.**

New Kidney Wax. The fleshy pods are flattened in form, from 6 to 7 inches in length, ½inch broad and ⅜inch thick; the color is a rich lemon-yellow. Under ordinary field culture the plants produce nearly twice as many pods as the Wardwell. The pods are remarkable for their meatiness, fine flavor, brittleness and absolute freedom from strings or tough fiber. **½lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $2.10, 15 lbs. $6.20.**

New Hodson Wax. A distinctly late variety, bearing enormous quantities of flat but fleshy pods of a creamy yellow color. The plant is vigorous, and comes into bearing in from 80 to 85 days from date of sowing the seeds. The pods of this variety often measure 7 to 8 inches in length and are remarkably free from spot or rust. **½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**

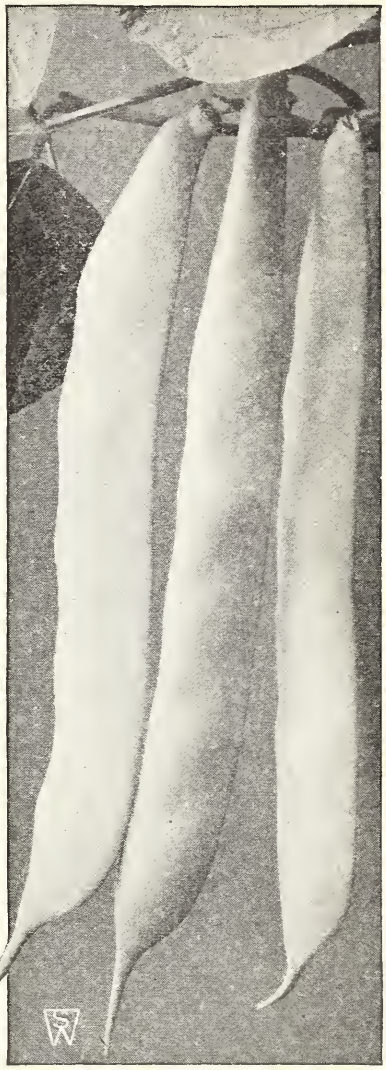
Improved Golden Wax. A very early variety with flat, golden pods. Pkt. 10 cts., ½lb. 20 cts., lb. 35 cts., 2 lbs 65 cts., 5 lbs. $1.60, 15 lbs. $4.70.

Improved Black Wax. The pods are round, and they are yielded in large quantities; early. ½lb. 20 cts., lb 35 cts., 2 lbs. 65 cts., 5 lbs $1.60, 15 lbs. $4.70.

Davis White Wax. Long, straight, handsome pods. The seed is white and excellent for green shelling and for baking ½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.

Wardwell Kidney Wax. Extra early; long, flat, waxy pods. ½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.

Hardy Wax. A new, stringless, round-podded variety remarkable for its heavy yielding properties. See text above



Sure-Crop Stringless. A fine flat-podded Wax Bean

BROAD BEANS

Windsor. The heavy pods are produced in pairs and usually contain three seeds. They are prepared for the table in the same way as Limas. As a matter of fact, Windsor Beans are sometimes termed the English Lima, but differ from all other American types in that they are **not sensitive** to cold. Good results are only obtainable from seedings made in **early spring** on strong retentive soil. **½lb. 30 cts., lb. 50 cts., 2 lbs. 95 cts., 5 lbs. $2.35, 15 lbs. $6.95.**

POLE or RUNNING BEANS

One pound will plant 200 hills

Old Homestead (Green Kentucky Wonder). An improved sort of this well-known Bean. The pods are entirely stringless and of silvery green color, hanging in large clusters from the top to the bottom of the pole. One of the most prolific. **Pkt. 10 cts., ½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**

Golden Cluster Wax. The leading early Wax Pole Bean. Pods are tender and of fine flavor. Few Beans equal this as a "snap sort" while young, or as a dry, pure white Shell Bean for winter use. **Pkt. 10 cts., ½lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $2.10, 15 lbs. $6.20.**

Kentucky Wonder Wax. Quicker to yield from seeding than most others. The long pods are meaty, brittle, and of good flavor. ½lb. 20 cts., lb. 35 cts., 2 lbs. 65 cts., 5 lbs. $1.60, 15 lbs. $4.70.

Lazy Wife. Green-Pod. The best late, green-podded Pole Bean. Pods medium dark green; broad, thick, very fleshy and entirely stringless. ½lb. 20 cts., lb. 35 cts., 2 lbs. 65 cts., 5 lbs. $1.60, 15 lbs. $4.70.

Scarlet Runner. Green-Pod. Bright scarlet flowers. Pkt. 10 cts., ½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.

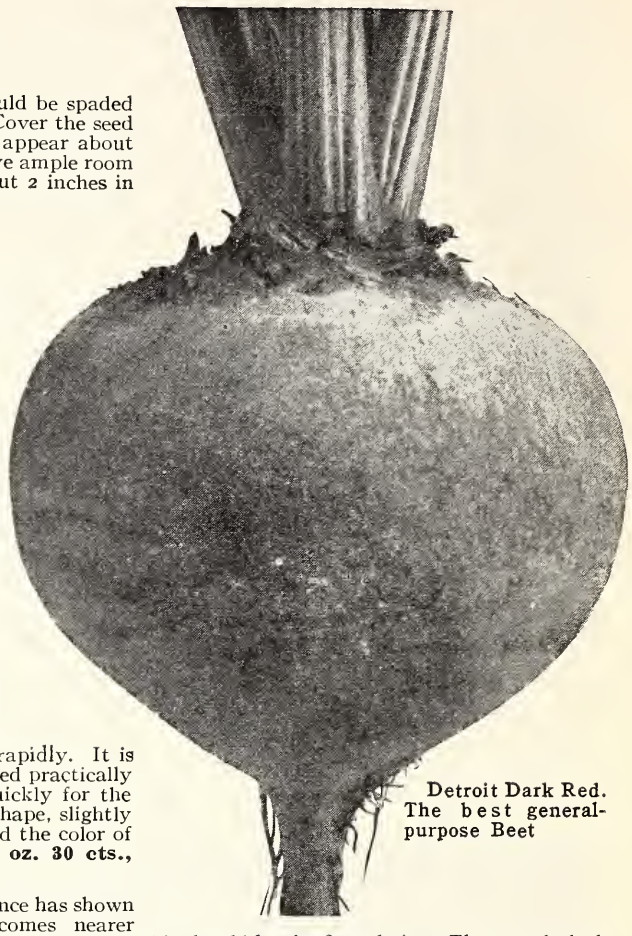
Yard-Long Asparagus. A remarkable Bean, yielding narrow rounded pods of enormous length. The quality is excellent. Pkt. 15 cts., ½lb. 50 cts., lb. 85 cts.

NOTE. We now offer Beans by weight instead of measure: one pound is equal to about one pint, two pounds to about one quart.

BEETS

One ounce will sow 100 feet of drill; 5 to 6 pounds to the acre

CULTURE.—Seed should be sown the latter part of April. The ground should be spaded well and deep, placing rows about 18 inches apart, and the drills 1 inch deep. Cover the seed carefully and firm in the ground by walking over the drills. When seedlings appear about 3 inches above ground, thin out to about 4 inches between the plants so as to give ample room for the proper development of the bulbs. Beets are best for pulling when about 2 inches in size. Successive sowings may be made up to the middle of July.



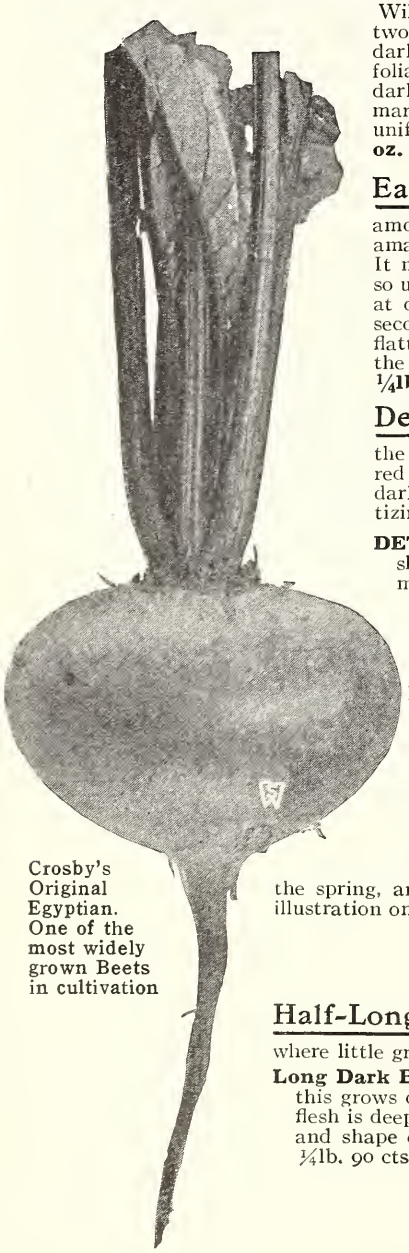
Detroit Dark Red. The best general-purpose Beet

ROUND TYPES

Eclipse. An extra-early sort which produces Beets sixty days from sowing. Of uniform, dark rosy red; top-shaped; easily pulled. Flesh dark purplish red with rose zones; remains in table condition for ten days, when it becomes tough. **Pkt. 10 cts., oz. 15 cts., ¼lb. 45 cts., lb. $1.35.**

Extra-Early Egyptian. A variety which grows very quickly, producing roots of fine quality, flat and smooth. They are pulled when 2 inches in diameter. **Pkt. 10c., oz. 20c., ¼lb. 65c., lb. $2.**

Crosby's Original Egyptian. One of the most widely grown turnip-shaped Beets in cultivation today. Will produce Beets ready for pulling within two or three days after Eclipse. The smooth, dark red roots are topped with light green foliage, which is prominently speckled with dark red. The flesh is carmine, handsomely marked with white zones, very tender and of uniformly sweet quality. **Pkt. 10 cts., oz. 15 cts., ¼lb. 45 cts., lb. $1.35.**



Crosby's Original Egyptian. One of the most widely grown Beets in cultivation

Early Wonder. A variety which has gained wide popularity among market-gardeners, and one which the amateur may also grow with every confidence. It may be sown early, and it matures very rapidly. It is so uniform in growth that the crop can be lifted practically at one time, yielding the land early and quickly for the second crop. The root is nearly globular in shape, slightly flattened. The leaves are of medium size, and the color of the flesh is deep blood-red. **Pkt. 15 cts., oz. 30 cts., ¼lb. $1, lb. $3.50.**

Detroit Dark Red. Extended experience has shown that this Beet comes nearer the ideal than any other, and where but one variety is used this should be the first choice. The round, dark red globe roots are uniformly smooth. The flesh of the very young Beets is almost black-red, turning to dark crimson with dark purple zones as the Beets grow larger. When cooked, the Beets are of an appetizing dark red and very sweet. **Pkt. 10 cts., oz. 15 cts., ¼lb. 45 cts., lb. $1.35.**

DETROIT DARK RED, Exhibition Strain. This is specially reselected for depth of color, uniformity of shape, and general refinement. It is developed particularly to meet the requirements of the exhibitor and market-gardener. Pkt. 15 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

Crimson Globe. In about 70 days from planting one-fourth of the Beets in the Crimson Globe row will be ready for table use. A peculiarity of this and the next variety is that the Beets do not all come to the eatable size at the same time, some growing faster than others, thereby lengthening the period of perfection. Flesh bright red with light purple zones. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

Edmand's Blood Turnip. Very regular in shape, deep blood-red, and exceedingly sweet. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

S. & W. Co.'s Winter Keeper. A distinct strain of a main-crop, globe-shaped Beet produced by many years of painstaking selection on the part of a grower who takes particular pride in striving after high ideals in seed selection. Two leading characteristics make this Beet worthy of any gardener's time and space: the uniformly excellent flavor of its flesh at all stages of development and the remarkable manner in which this quality is preserved during winter storage. Beets are almost globe-shaped, tapering somewhat toward the root. The flesh is dark red, sweet and tender at all stages of growth regardless of size. They may be stored in a cellar or pit until the spring, and will cook more tender and sweet than ordinary varieties will when taken from the garden. (See illustration on opposite page.) **Pkt. 15 cts., oz. 45 cts., ¼lb. $1.50, lb. $5.**

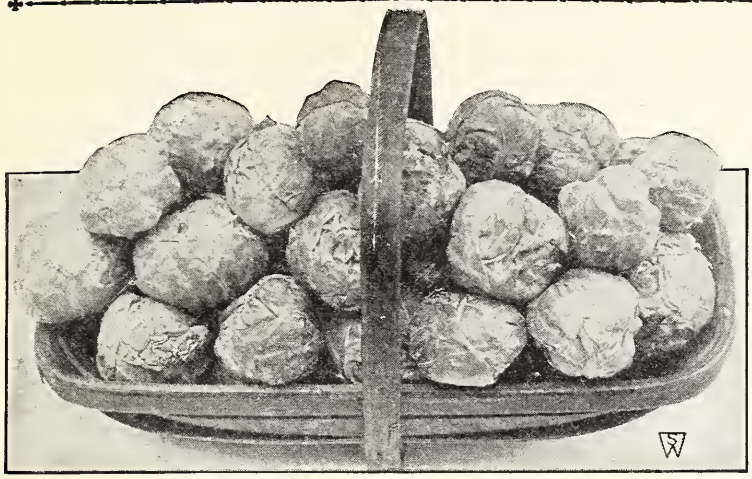
HALF-LONG AND LONG TYPES

Half-Long Blood. An entirely distinct variety. The roots are symmetrical, somewhat pear-shaped, smooth and handsome; flesh a rich, dark red, very sweet, never becoming woody. Economical where little ground is available. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Long Dark Blood. (Out of ground.) A late variety the root of which is over a foot long. Five inches or more of this grows out of the ground, and the harvesting of the Beet is therefore not attended with much difficulty. The flesh is deep red in color, sweet, and of high quality; it keeps in fine condition through into the winter, and its size and shape obviously make it the most economical sort where garden space is limited. Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.

Cow Beets (Mangels) and Sugar Beets

See Root Crops on pages 42 and 43



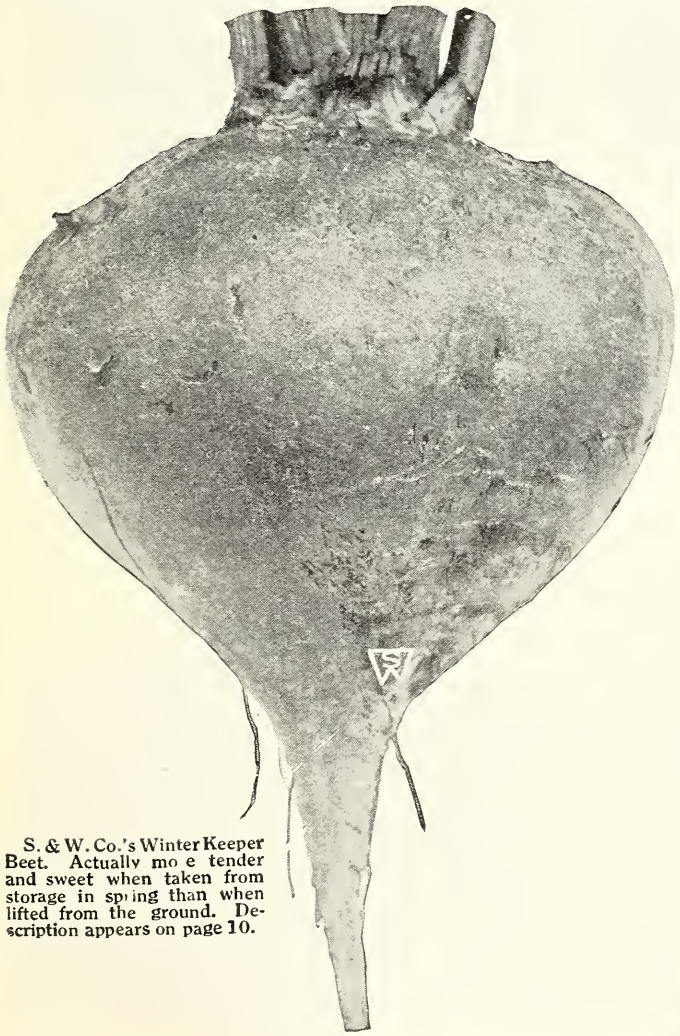
S. & W. Co.'s Favorite Brussels Sprouts

BRUSSELS SPROUTS

One ounce will produce about 3,000 plants

CULTURE.—Sow in May, in shallow drills, 1 inch deep and 12 inches apart. Transplant in July. When the crown, or top sprout is beginning to head, pinch it out, to admit of the whole strength being thrown into the side shoots. Very hardy. This is a delicious vegetable and should find a place in every garden; greatly improved by first frosts.

S. & W. Co.'s Favorite. New. Semi-dwarf, thickly covered with sprouts by the end of September; excellent. Pkt. 15 cts., ½oz. 25 cts., oz. 40 cts., ¼lb. $1.40, lb. $5.



S. & W. Co.'s Winter Keeper Beet. Actually more tender and sweet when taken from storage in spring than when lifted from the ground. Description appears on page 10.

CARDOON

A vegetable that is grown somewhat like celery and served after the manner of asparagus. Sow in the open ground in May, and thin or transplant the seedlings so that they stand 2½ feet, one from the other, in rows 4 feet apart. A catch-crop such as beans, lettuce or beets may be taken between the rows. At the end of the summer, and two or three weeks before using, it is necessary to blanch the Cardoons. The heads of the plants are tied together, straw is piled against them, and the surrounding soil is then heaped up against the straw. **Pkt. 10 cts., oz. 30 cts., ¼lb. $1, lb. $3.50.**

CHERVIL

One ounce will sow 150 feet of drill

CULTURE.—The curled Chervil is cultivated like parsley and used for garnishing and flavoring soups and salads.

Moss Curled Extra. Pkt. 10c., oz. 25c., ¼lb. 80c., lb. $2.50.

CRESS

(Pepper Grass)

One ounce will sow 100 feet of drill

CULTURE.—Sow early in the spring. The leaves are crisp, tender, and pungent in flavor. Sow at short intervals for succession, as it soon runs to seed.

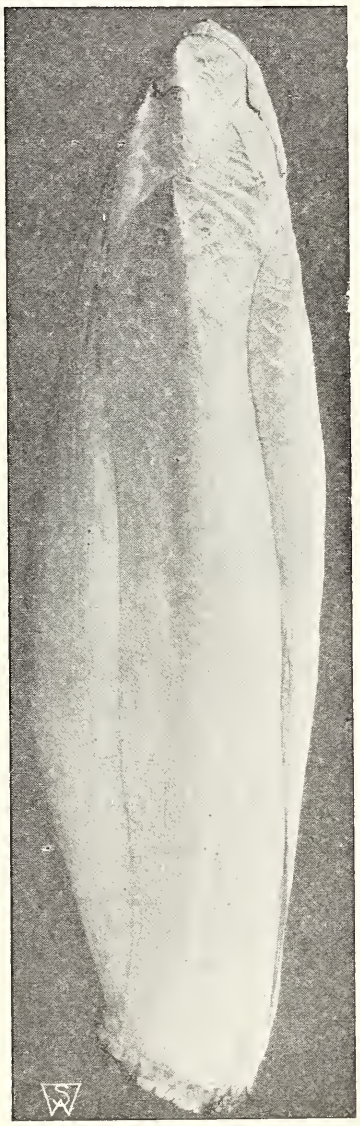
Curled, or **Pepper Grass.** Pkt. 5 cts., oz. 15 cts., ¼lb. 50 cts., lb. $1.50.

True Erfurt Water Cress. Pkt. 15 cts., ½oz. 35 cts., oz. 55 cts., ¼lb. $1.95, lb. $7.

CHICORY

Witloof, or French Endive.

A winter salad, most delicious served with French dressing and eaten like Cos lettuce. The seed should be sown in the open ground not later than June, in drills 12 to 18 inches apart, thinning out the plants so that they will not stand closer than 3 inches. The plant forms long, parsnip-shaped roots, which should be lifted in the fall, cutting off the leaves about 1½ inches from the neck and shortening the roots by cutting off the bottoms to within 8 inches of the neck. The roots should then be planted in a trench 16 to 18 inches deep in a dark, warm cellar or under a greenhouse bench, and placed upright about 1½ to 2 inches apart, which will allow the neck of the root to come within 9 inches of the level of the trench. The trench should be filled with a light soil, and if a quicker growth is desired, this can be accomplished by a mulch of fresh manure about 2 feet deep. It requires about one month to force the roots. **Pkt. 10 cts., oz. 35 cts., ¼lb. $1.25, lb. $4.**



Witloof, or French Endive. From seeds sown in spring or early summer, roots are produced, and from these roots the well-known Witloof is forced during winter.

Common, or **Wild** (Barbe de Capucin). Pkt. 10 cts., oz. 35 cts., ¼lb. $1.25, lb. $4.

Large-rooted Magdeburg. Cultivated for the roots. Pkt. 10 cts., oz. 35 cts., ¼lb. $1.25, lb. $4.

For Endive, see page 20.

WITLOOF ROOTS for forcing are offered on page 40

CABBAGE

One ounce will produce about 3,000 plants

CULTURE.—Sow early kinds in hotbeds in February and March, and in the open ground during April and May. Late varieties for fall and winter use should also be sown in May. Early sorts may be planted in rows 2 feet apart, with 20 inches between plants in the row; late kinds should stand at least 2 feet each way. To be well grown, Cabbages require a deep, rich, loamy soil, but should it be too rich some late kinds may show signs of bursting. If this occurs, push the plants over to one side and so check their growth.

Disease germs may occasionally be carried on the seed-coats, but in the majority of cases club-root and other troubles are caused by growing Cabbages in infected soil. Growers of Cabbage in quantity are advised to sterilize their seed before sowing by steeping for 20 minutes in one ounce of formaldehyde, diluted with 2 gallons of water; wash in clear water and lay the seed in the air to dry. Seed-beds may also be sterilized by drenching the soil with a 1 to 100 or 1 to 200 solution of formaldehyde at the rate of ¾gallon per square foot, or it may be steamed. In the field, crop rotation is to be recommended, and the land regularly limed if there is any tendency to acidity.

Improved Jersey Wakefield Cabbage

EARLY AND MIDSEASON

S. & W. Co.'s Famous Early Conical.

An extremely early variety of conical form, quite distinct from any other on the market. An ideal sort for private gardens, producing solid heads sooner than other varieties and requiring less space than most kinds. **Pkt. 20 cts., ¼oz. 35 cts., ½oz. 60 cts., oz. $1.10, ¼lb. $4.**

Improved Early Jersey Wakefield. While this variety is not quite so early as S. & W. Co.'s Famous Early Conical, it has been long considered as the best early conical-type Cabbage which we have. The heads are hard and solid with just a few outside leaves, which are unusually thick, enabling them to stand cold weather when wintered in coldframe. **Pkt. 15 cts., ½oz. 35 cts., oz. 60 cts., ¼lb. $2.**

Charleston, or Large-Type Wakefield. Retains all the characteristics of the Improved Early Jersey Wakefield with the added advantage of greater size. **Pkt. 15 cts., ½oz. 35 cts., oz. 60 cts., ¼lb. $2.**

Babyhead. Extreme earliness and small size are characteristic of this new variety. The head is less than 6 inches across, round, firm, and of splendid mild cooking quality. The outer leaves are few and small, and the stem is short. Babyhead is recommended as the first to reach the table when grown outdoors and also for growth under glass, for which purpose it is ideal. **Pkt. 25 cts.**

Copenhagen Market. The best of all early Cabbages. Stands longer without bursting than other early sorts. Everyone familiar with the Cabbage knows the old and popular Danish Ballhead, the best of all late Cabbages. This new extra-early variety, ripening with Charleston Wakefield, also originated in Denmark, and is as good, in its class, as the old favorite Danish Ballhead. The stem is short, the head round and solid. When ready for cutting, Copenhagen Market is the heaviest of the extra-early varieties, and if left until fully mature, frequently weighs 8 to 10 pounds. The leaves are small, compact and close to the head, so it will stand close planting. The inside is fine-grained, tender, pure white and compact. A leader for the home-garden and market. **Pkt. 20 cts., ¼oz. 35 cts., ½oz. 60 cts., oz. $1.10, ¼lb. $4.**

Succession. A splendid second-early, round-headed sort, with enormous heads of exceedingly tender quality. Pkt. 15 cts., ½oz. 45 cts., oz. 80 cts., ¼lb. $2.50.

Early Summer. Pkt. 15 cts., ½oz. 35 cts., oz. 60 cts., ¼lb. $2.

LATE CABBAGES FOR WINTER STORAGE

Danish Drumhead. Averages much larger size than the Ballhead; is about two weeks earlier; fine-grained and sweet-flavored; the best Cabbage for winter use. **Pkt. 20 cts., ¼oz. 35 cts., ½oz. 60 cts., oz. $1.10, ¼lb. $4.**

Large Late Flat Dutch. One of the most reliable in cultivation for winter use; produces immense heads of the finest quality; splendid keeper. Pkt. 10 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. $1.50.

Autumn King. We believe this to be one of the finest strains of Cabbage ever offered. It produces regular, even heads of enormous size. Pkt. 15 cts., ½oz. 50c., oz. 90 cts., ¼lb. $2.75.

RED CABBAGES

Mammoth Rock Red. This is by far the best, largest and surest-heading Red Cabbage ever introduced. The plant is handsome, with numerous spreading leaves. The head is large, round, very solid. Pkt. 15 cts., ½oz. 45 cts., oz. 80c., ¼lb. $2.50.

Red Zenith. (See Novelties, page 2.) Pkt. 20 cts., ¼oz. 35 cts., ½oz. 60 cts., oz. $1, ¼lb. $3.50.

SAVOY CABBAGES

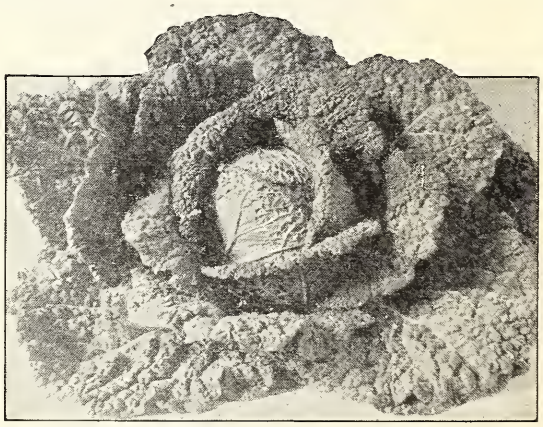
Early Dwarf Ulm. A small, quick-growing variety for early use. Pkt. 15 cts, ¼oz. 30 cts., ½oz. 55 cts., oz. 95 cts., ¼lb. $3.25.

American Drumhead Savoy. None of the late-growing varieties can begin to equal in flavor this sort for family use; heads large. Pkt. 10 cts., ½oz. 30 cts, oz. 55 cts., ¼lb. $1.75.

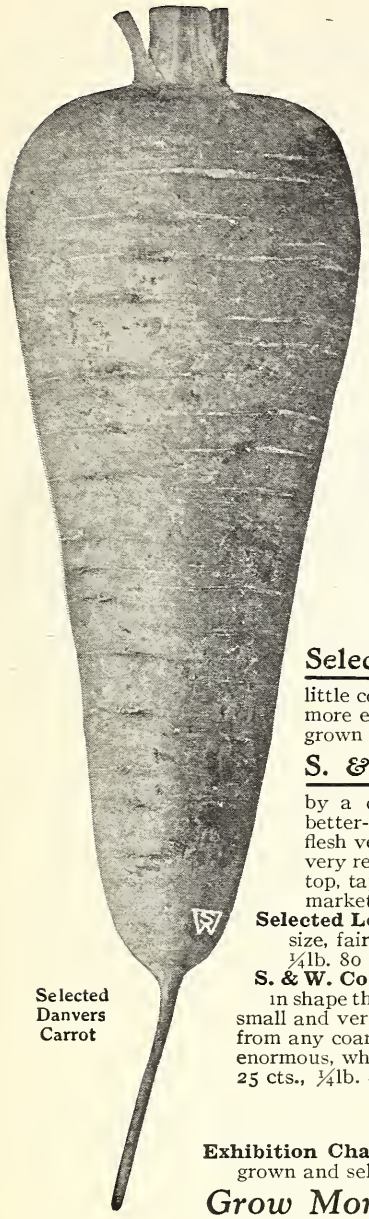
Early Cone Savoy. (See Novelties, page 2.) Pkt. 20 cts., ¼oz. 35 cts., ½oz. 60 cts., oz. $1.10, ¼lb. $4.

PE-TSAI, CHINESE or "CELERY" CABBAGE

Pe-Tsai produces beautiful, crisp, celery-like heads that somewhat resemble Cos lettuce. **Pkt. 10 cts., ½oz. 30 cts., oz. 55 cts., ¼lb. $1.75.**



American Drumhead Savoy Cabbage



Selected Danvers Carrot

CARROT

One ounce will sow 100 feet of drill

CULTURE.—To produce the finest crop, the land should be thoroughly manured the previous season; forked roots will result if the seed is sown on freshly manured soil. Sow the early sorts in March and April, in drills 1 inch deep and 14 inches apart; thin out to 4 inches. For main crop sow in May or beginning of June. Care should be taken, at all times, to see that soil is firm over the seeds, either by means of the feet, roller, or garden drill.

BEST EARLY KINDS

Early French Forcing. The earliest variety and the one largely grown for forcing purposes. It makes a small, almost globe-shaped root of an orange-red color. Pkt. 15 cts., oz. 35 cts., ¼lb. $1.25, lb. $4.

Early Half-Long Scarlet Nantes. The skin is smooth, flesh red, and without any core or heart. It is excellent for forcing, and for fine quality and perfect shape can hardly be surpassed. Pkt. 10 cts., oz. 30 cts., ¼lb. 95 cts., lb. $3.25.

Oxheart, or **Guerande.** It is intermediate between Half-long and Horn varieties, and perfectly distinct. The shape is nearly oval and the color and quality all that can be desired. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

Selected Chantenay. A very splendid type of the half-long, stump-rooted Carrot. Averages 5½ to 6 inches in length, broad at the neck, narrowing gradually to a blunt end. The flesh is rich orange-red, free from core, tender, fine flavored, and of excellent table quality. **Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. $1.50.**

Early Scarlet Horn. Favorite for early crop but not large. Considered a good, general-purpose, all-season variety, since, sown late in the season, the roots are firm enough for winter storage. Sometimes used for forcing. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

S. & W. Co.'s Melting Marrow. (See Novelties, page 2.) Pkt. 15 cts., oz. 40 cts., ¼lb. $1.25, lb. $4.

LATE SORTS

Particularly Suitable for Winter Use

Selected Danvers. A handsome, cylindrical-shaped Carrot of good size and stump-rooted. It is of a rich, dark orange color, grows to large size, is smooth, and has little core. It is a first-class Carrot for all soils, yields a greater weight per acre than any other variety, and is more easily harvested than the old long varieties. This selected stock we are now offering has been specially grown for market-gardeners and is sure to give satisfaction. **Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. $1.50.**

S. & W. Co.'s Improved Long Red Surrey. A great improvement on the various types of Long Orange Carrot obtained by a careful selection, for successive years, of the best-formed and deepest-colored roots. It is larger, better-flavored, of a deeper orange color, and more certain to produce a crop than any type of long Carrot; flesh very sweet and tender; very productive, and never becomes hard or woody at the heart. The roots grow very regular and smooth; they are of good size, being from 6 to 8 inches in length and 2 inches in diameter at the top, tapering gradually from the shoulder to the tip of the roots. In color, shape or size, this is the ideal sort for market-gardener's late crop. **Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.**

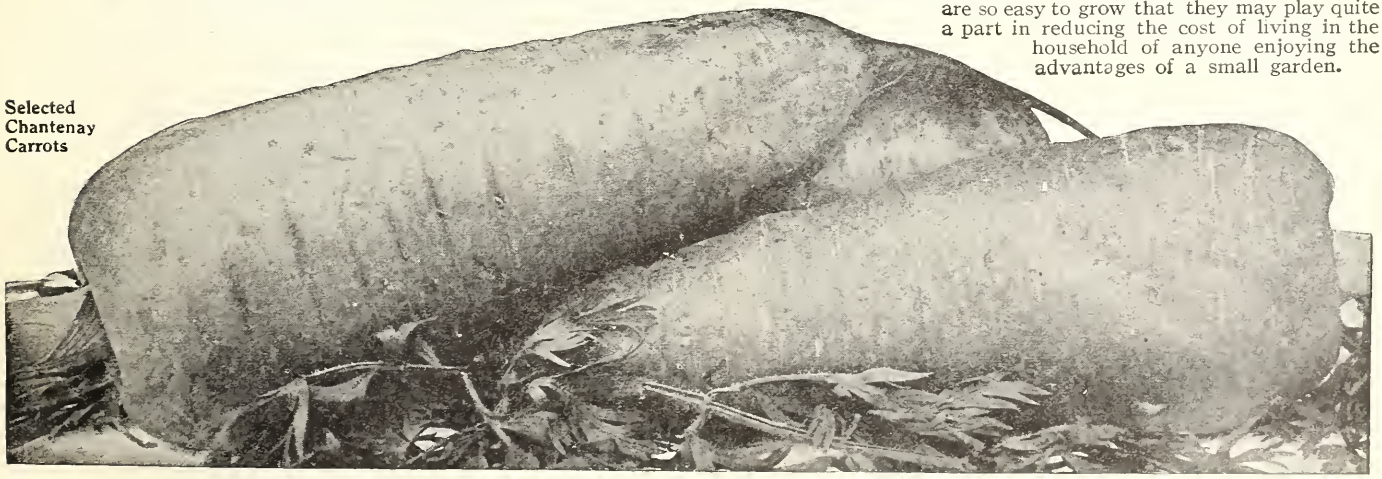
Selected Long Orange Improved. One of the most desirable for either garden or field culture; it grows to a large size, fair specimens averaging 12 inches in length and 3 inches in diameter at the top. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

S. & W. Co.'s New Red Intermediate. This is certainly the best main-crop Carrot. It is one of the most uniform in shape that we know, and where the soil is favorable, it will always grow clean and free from side roots. The core is small and very tender, and there is no indication of woody character at any stage of its growth. It is also entirely free from any coarse, rank flavor so common with many sorts. For private purposes it is ideal, and its yielding capacity is enormous, which, with its handsome color and fine appearance, makes it invaluable to truckers. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

TWO CARROTS FOR PRIZE-WINNING

Exhibition Chantenay, Exhibition Danvers. Two fine strains of these standard varieties that have been specially grown and selected for exhibition purposes. *We refer our patrons to page 2 for description and prices.*

Grow More Root Crops. There is a wealth of satisfaction in being able to go to your root cellar or "pit" in the garden during the winter months and dig up vegetables that sell on the market at 10 to 25 cents for a bunch of five. Their liberal use is most essential to our physical welfare. And they are so easy to grow that they may play quite a part in reducing the cost of living in the household of anyone enjoying the advantages of a small garden.

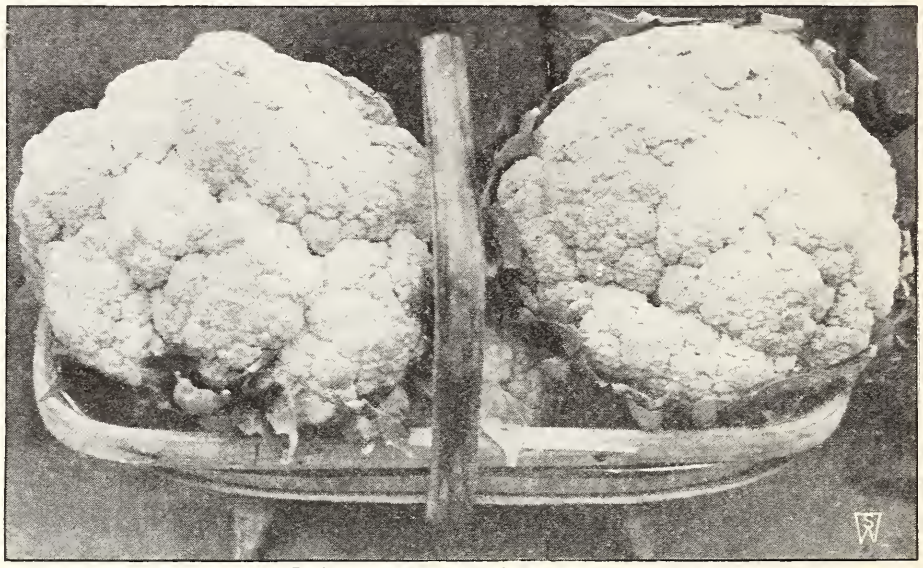


Selected Chantenay Carrots

CAULIFLOWER

One ounce will produce about 3,000 plants

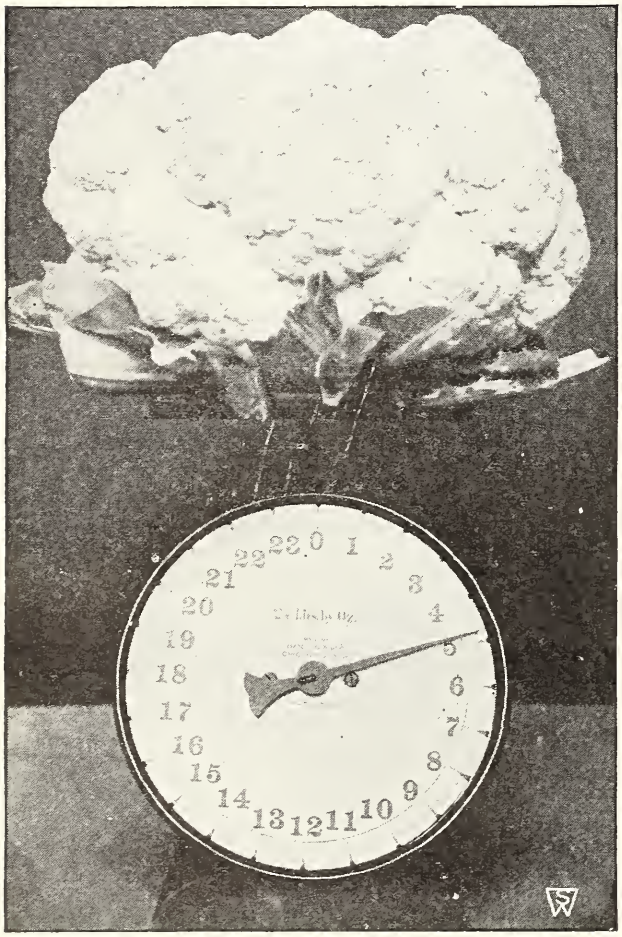
CULTURE.—Sow the first week in May and prick out on a rich piece of ground; transplant in July. For wintering under glass sow in the second and last weeks in September; transplant thickly into a cold pit or frame; give plenty of air in mild weather, and cover up well when conditions are severe. Again sow in February in a hotbed and transplant in April. For Cauliflower the ground should be well prepared by trenching, incorporating at the same time a good share of rotten manure. Select new ground, if possible, as Cauliflower rarely succeeds on soil which has been cropped year after year with other kinds of vegetables. Plant in rows 20 inches apart and 2 feet between the rows. To be successful with this vegetable, rich soil and abundant moisture at all stages of development are absolutely essential. Cauliflower does not form solid heads in hot, dry climates.



S. & W. Co.'s Best of All Cauliflower

The Best Early Cauliflower, S. & W. Co.'s Best of All.

The easiest grown and surest heading Cauliflower offered today. In habit the plant is very dwarf, stocky, and erect. It has very few outer leaves and, as a consequence, the young Cauliflower plants may be planted less than 2 feet apart each way. All that is necessary is to select suitable soil, when every plant will form a large, solid, perfect head of the finest table quality and of handsome appearance. **Pkt. 25 cts., ⅛oz. $1, ¼oz. $1.75, ½oz. $3.25, oz. $6.**



Early Snowball. An all-the-year-round Cauliflower, being suitable alike for forcing, for spring use out-of-doors, and for latest fall crops

Early Snowball. This wonderful, sure-heading variety is of characteristic dwarf habit, the outer leaves being small, hence it is particularly adapted to growing under glass during winter and spring. Snowball is the most popular Cauliflower grown in America today, and the S. & W. strain is used so largely by commercial growers because of the solidity and purity of its head, its large size, and its uniform reliability. **Pkt. 20 cts., ⅛oz. 70 cts., ¼oz. $1.30, ½oz. $2.50, oz. $4.50.**

Danish Dry Weather. Especially adapted to sections subject to dry seasons. The heads grow to a large size, are very solid, pure white and of delicious flavor. It will prove valuable for growing in the southern states, where the climate is hot and long seasons of dry weather are experienced. **Pkt. 20 cts., ⅛oz. 55 cts., ¼oz. 95 cts., ½oz. $1.60, oz. $3.**

Extra-Early Dwarf Erfurt. This Cauliflower is an extra-early sort, of dwarf habit, and desirable for forcing or planting in the open ground. Pkt. 20 cts., ⅛oz. 65 cts., ¼oz. $1.20, ½oz. $2.25, oz. $4.

Autumn Giant. This is a larger and later type than the above varieties. It is popular in South America and the warmer parts of this country, though many growers in this section also find that it suits their requirements. Autumn Giant is tall and sturdy, needing in consequence more room to develop than the early types. **Pkt. 10 cts., ¼oz. 40 cts., ½oz. 60 cts., oz. $1.**

Suggestions for Soil Improvement

Plow under a green crop for Cauliflower and other plants that need added humus in the soil. It will retain plant-food, hold moisture, and is the best adjunct to—or substitute for—animal manure. Do not allow even the smallest amount of land to remain idle, but sow a cover crop as soon as a space becomes available, preferably allowing the cover crop to stand over the winter, and plowing or digging it under in the spring.

Suitable crops to plant for turning under, used either alone or in combination, are:

	Quantity per acre when sown alone	Quantity per 100 sq. yds.	Price subject to market changes		
SPRING SEEDING			Lb.	10 lbs.	100 lbs.
Crimson Clover	20 lbs.	1 lb.	$0 25	$2 25	$20 00
Spring Vetch	100 lbs.	2 lbs.	20	1 50	12 00
			Qt.	Pk.	Bus.
Spring Rye	2 bus.	2 qts.	$0 25	$1 25	$3 75
SUMMER SEEDING					
Soy Beans	2 bus.	2 qts.	30	1 25	4 00
Cowpeas, Whippoorwill	2 bus.	2 qts.	20	1 50	4 50
Japanese Buckwheat	2 bus.	2 qts.	20	1 00	3 00
EARLY FALL SEEDING					
Winter Rye	2 bus.	2 qts.	20	1 00	3 50
Winter Wheat	2 bus.	2 qts.	20	1 00	3 50
			Lb.	10 lbs.	100 lbs.
Winter or **Hairy Vetch**	100 lbs.	3 lbs.	$0 30	$2 75	$25 00

CELERY

One ounce will produce 3,000 plants

CULTURE.—Sow the seed in a coldframe or dry border as early as the ground can be worked, in drills 8 to 10 inches apart, covering the seed ¼inch deep. When fairly out of the seed-leaf, they may be transplanted to another bed or thinned out to 5 or 6 inches apart, and allowed to grow until wanted for transplanting out into the beds or trenches. Early in July is the proper time to set out the plants in the trenches, or as soon after early July as possible. Rows or double rows should be 3 feet apart and the plants set about 8 inches apart in the row. As the plants grow, they should be earthed up to blanch them, care being taken not to let the earth get into the heart of the plant. For keeping over the winter, they can be banked up with earth and covered over with litter to protect from frost where they have grown, placing boards on top to keep out the rain.

Paris Golden Self-blanching Celery

EARLY SELF-BLANCHING VARIETIES

New Golden Plume and New Earligreen. These two exclusive Stumpp & Walter introductions are both fully described on page 3. Price, each variety: **Pkt. 25 cts., ¼oz. $2.50, ½oz. $4, oz. $7.50.**

Improved White Plume. One of the most popular, because it is not necessary to bank up as with other Celeries. It is tender and of the very best flavor. **Pkt. 10 cts., ½oz. 35 cts., oz. 55 cts., ¼lb. $2, lb. $7.50.**

Paris Golden Self-Blanching. The plant is compact and stocky, with light, golden green leaves. It produces stalks which are solid, brittle, and possess a fine nutty flavor. The plant blanches quickly to a beautiful golden yellow. Our stock is grown in France by the originator, and is free from plants of the green type. A splendid early Celery for the family garden, and widely used by the commercial grower. **Pkt. 20 cts., ½oz. 55 cts., oz. $1, ¼lb. $3.50, lb. $12.**

WELL-KEEPING WINTER VARIETIES

New Easy-Blanching. In appearance this variety is somewhat suggestive of Paris Golden Self-blanching, but it is green in color and a larger plant; the leaves blanch white. It is very hardy and much less liable to blight. One of the easiest of all Celeries to grow, it is as good a keeper as any late sort, though maturing but two weeks later than Paris Golden. The flesh is crisp and brittle, the flavor particularly attractive. New Easy-blanching combines ease of cultivation, early maturity, high quality, and good keeping properties. We offer seed grown in the East by one of the leading Celery growers for the New York market. **Pkt. 20 cts., ¼oz. 75 cts., ½oz. $1.40, oz. $2.50, ¼lb. $8.50.**

Giant Pascal. A deep green selection from the Golden Self-blanching Celery. The stalks are very large, thick, solid, and crisp. It has a fine, nutty flavor. Pkt. 10 cts., ½oz. 35 cts., oz. 55 cts., ¼lb. $2, lb. $7.50.

Improved Golden Heart. The heart, when blanched, is a rich golden yellow. Pkt. 10 cts., ½oz. 35 cts., oz. 55 cts., ¼lb. $2, lb. $7.50.

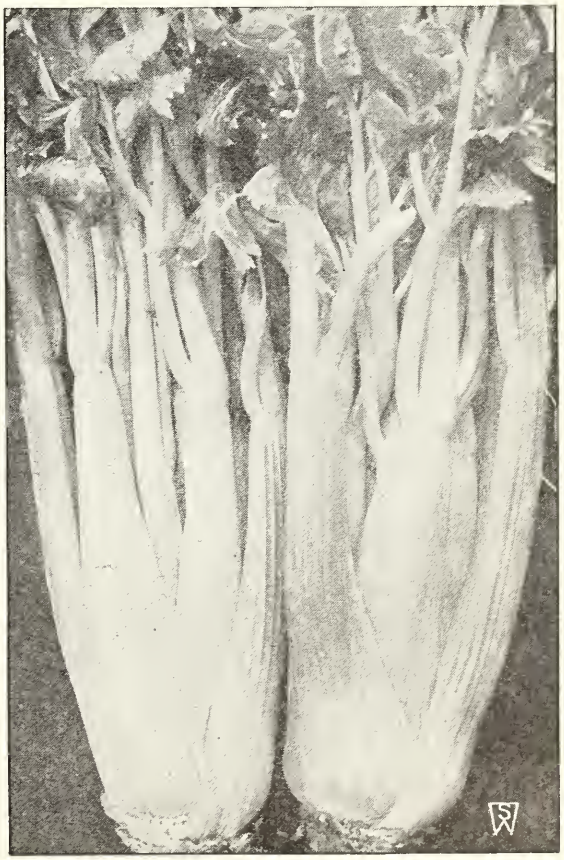
Covent Garden Red. A splendid dark rose variety; large and of nutty flavor. Pkt. 15 cts., ½oz. 55 cts., oz. 90 cts., ¼lb. $3, lb. $10.

CELERIAC (Turnip-Rooted Celery)

A variety of Celery with turnip-shaped roots, which are white-fleshed, tender and possess the flavor of Celery stalks.

Large Smooth. Pkt. 10 cts., oz. 25 cts., ¼lb. 85 cts., lb. $3.

Celeriac may be served cooked or as a salad



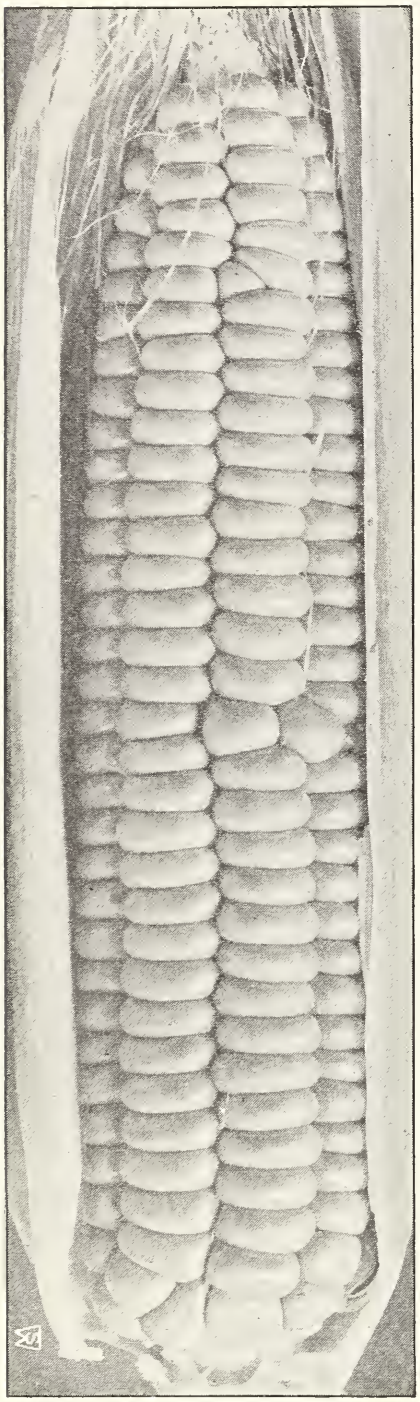
New Easy-blanching may be whitened in a shorter time than any other Celery; will blanch up, in fact, in cold storage. It keeps better than most late varieties.

SUGAR CORN

NOTE.—The American Seed Trade generally has adopted the cental system of pricing Corn, Beans, and Peas. We therefore offer by weight instead of measure. One pound of Corn is equal to about 1½ pints; 2 pounds to about 1½ quarts; the average weight of a bushel of Sweet Corn is 45 pounds.

One pound will plant 200 feet of drill or 200 to 300 hills

CULTURE.—Plant for succession of crop every three weeks, from April to July, in hills 3 feet apart each way, and six seeds in a hill; cover about half an inch; thin out to three plants. **If ordered alone, add for mailing, 5 cts. per ½lb., 10 cts. per lb., 15 cts. per 2 lbs.**



Golden Bantam. The standard for quality by which others are judged

EARLY SORTS

Aristocrat. An early white variety growing 4 to 5 feet high, with heavy 12-rowed ears measuring 8 to 10 inches long. The flavor is particularly fine, and the grains are large and meaty. Aristocrat is suitable for both the private and market-grower. It impressed us favorably at our trial-grounds, and, in consequence, we recommend it with every confidence. **Pkt. 15 cts., ½lb. 30 cts., lb. 50 cts., 2 lbs. 95 cts., 5 lbs. $2.35, 15 lbs. $6.95.**

Early Mayflower. Is fully a week or 10 days earlier than White Cory; and when we say that in size of ear, tenderness and sweetness of the kernels it is very noticeably superior to White Cory, we think we have said enough to indicate that the variety has distinct merits. The ears are long and well filled from tip to butt with large, tender, fine-flavored, white kernels. **½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**

Golden Bantam. Perhaps the sweetest Corn grown; *the* standard for quality by which others are judged. Plant attains a height of only 3 to 4 feet, usually bearing two or more ears to the stalk. The ears are compactly filled with kernels which when ready for the table are cream-yellow. Golden Bantam is one of the hardiest varieties of Corn grown, therefore it can be planted with safety earlier than other varieties. This characteristic also adapts it to localities having cool summer weather, a continuous supply being maintained by successive plantings. (See illustration of a typical ear.) **Pkt. 10 cts., ½lb. 20 cts., lb. 35 cts., 2 lbs. 65 cts., 5 lbs. $1.60, 15 lbs. $4.70.**

Metropolitan. Combines the three essentials of a good Sugar Corn, namely, earliness, productiveness, and unusually superior flavor. The 10-rowed ears are 8 to 9 inches long and they are crowded with tender, melting grains. In our opinion the best early white Corn. **Pkt. 10 cts., ½lb. 20 cts., lb. 30 cts., 2 lbs. 50 cts., 5 lbs. $1.15, 15 lbs. $3.25.**

Howling Mob. Is ready for use only 3 to 5 days later than the extra-early Cory when both are planted at the same time, but the ears are much larger in size, while the grains are much whiter and sweeter. As an early variety of large size, we cannot too highly praise Howling Mob. **½lb. 30 cts., lb. 50 cts., 2 lbs. 95c., 5 lbs. $2.35, 15 lbs. $6.95.**

Golden Rod. A staunch, tall-growing variety, yielding two large ears to each plant. The bright golden color of the ear makes it good to look upon, and it is as good as it looks. ½lb. 30 cts., lb. 50 cts., 2 lbs. 95 cts., 5 lbs. $2.35, 15 lbs. $6.95.

White-Cob Cory. A standard first-early variety. For a quick-growing sort the ears are large, and they are well filled with medium-sized grains. A favorite with the market-grower for his earliest crop. ½lb. 25c., lb. 40c., 2 lbs. 75c., 5 lbs. $1.85, 15 lbs. $5.45.

Crosby's Early. Ears good size; fine quality. ½lb. 20c., lb. 30c., 2 lbs. 50c., 5 lbs. $1.15, 15 lbs. $3.25.

Black Mexican. Very sweet; grains black. ½ lb. 25c., lb. 40c., 2 lbs. 75c., 5 lbs. $1.85, 15 lbs. $5.45.

De Lue's Golden Giant, and **New Early Malcolm.** (See Novelties, page 4.) Each, pkt. 15 cts., ½lb. 30c., lb. 50c., 2 lbs. 95 cts., 5 lbs. $2.35, 15 lbs $6.95.

S. & W. Co.'s Midget. (See Novelties, page 4.) Pkt. (50 seeds) 50c., 12 pkts. $5.

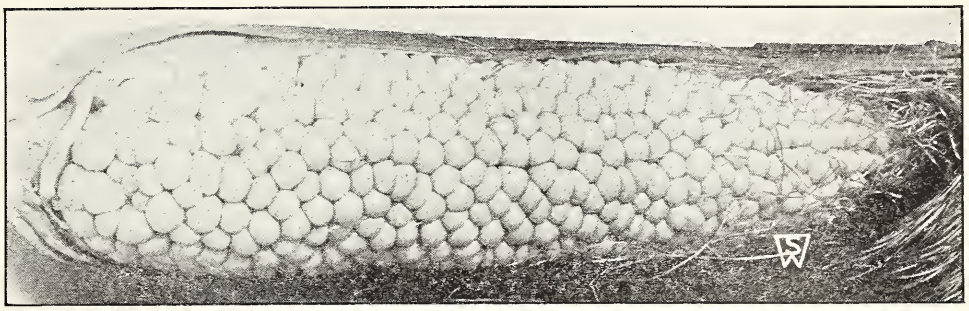
Earliness, productiveness, and superior flavor are combined in Metropolitan Sugar Corn

EUROPEAN CORN BORER

Our Seed Corn is grown in the West, in territory that is free of this pest; our customers may therefore plant our seed with the fullest confidence.

SUGAR CORN, LATE SORTS

Country Gentleman. Retains its delicate flavor and tenderness even when a little old, as the ears are encased in a heavy husk, which tends to keep the ear "in the milk" for several days longer than other varieties. The cob is unusually small and the pearly white kernels of great depth. **Pkt. 10 cts., ½lb. 20c., lb. 30 cts., 2 lbs. 50 cts., 5 lbs. $1.15, 15 lbs. $3.25.**



Country Gentleman is the "All meat" Corn. Its cob or core is smaller, and its grains are deeper than those of any other Corn

Stowell's Evergreen. Now recognized everywhere as a standard variety, both for home use and market, and is the general favorite. The ears are of large size, grains deep, exceptionally tender and sugary, and have the advantage of remaining longer in the green state than any other. Our stock has been carefully grown and selected to avoid the tendency to a shorter grain and deterioration in the evergreen character of this best of all late sorts. **Pkt. 10 cts., ½lb. 20 cts., lb. 30 cts., 2 lbs. 50 cts., 5 lbs. $1.15, 15 lbs. $3.25.**

Late Mammoth. Immense ears and very sweet. ½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.
Long Island Beauty. A favorite among New York market-growers. Pkt. 10c., ½lb. 20c., lb. 30c., 2 lbs. 50c., 5 lbs. $1.15, 15 lbs. $3.25.

Gather Corn Daily from June to October

WE OFFER THE FOUR MOST SATISFACTORY SORTS IN A SPECIAL "COLLECTION"

Our conception of the most reliable and sweetest varieties is represented in these Collections. They are prepared during November and December before our real spring selling season commences. We are thus able to give you the benefit of lower operating costs, and the purchase of these Collections is thus a real economy, the prices of the Collections being sensibly under the total cost were each sort purchased separately. The object of the Collection is defeated if changes are made, and we request that you do not ask us to make alterations.

The following four varieties are included in the assortment:

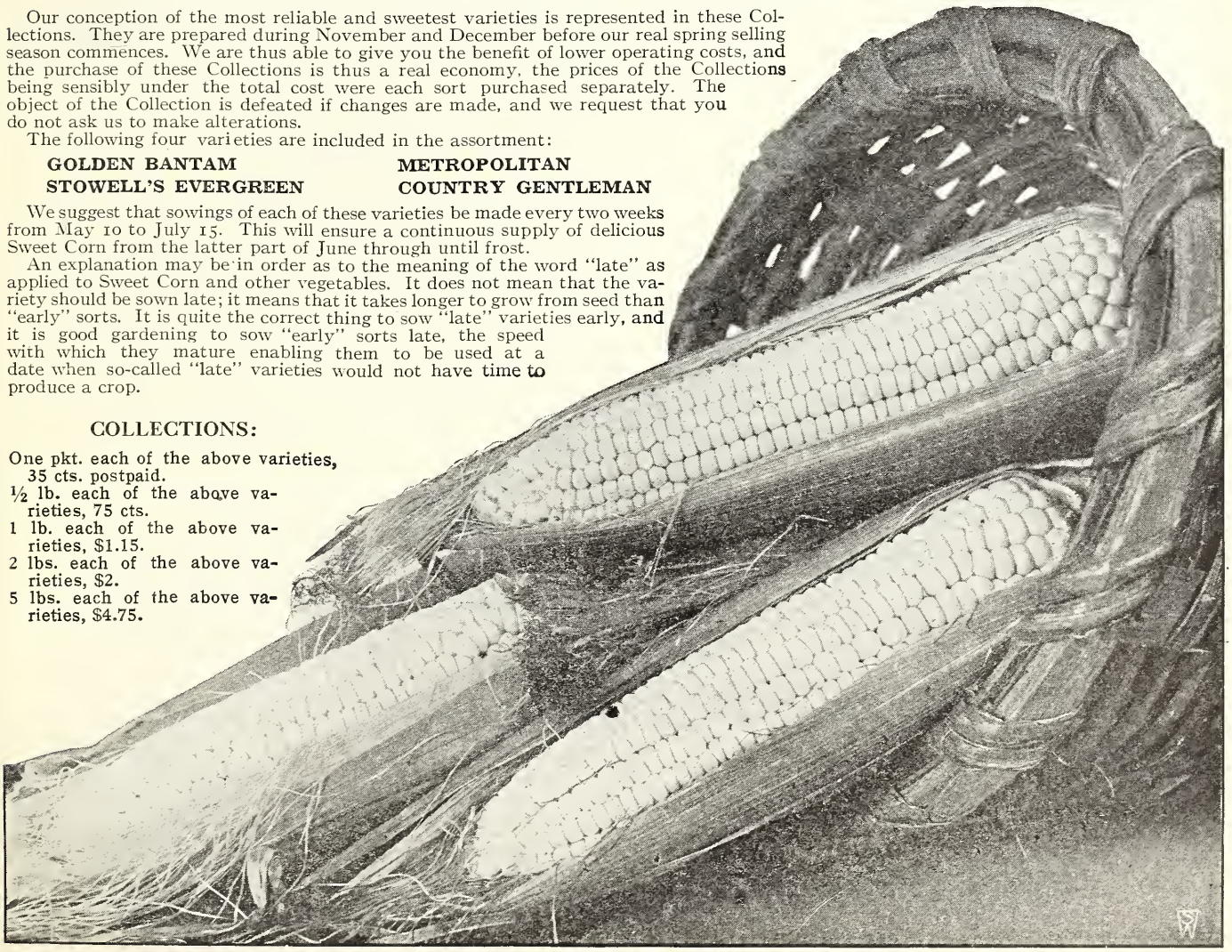
GOLDEN BANTAM — **METROPOLITAN**
STOWELL'S EVERGREEN — **COUNTRY GENTLEMAN**

We suggest that sowings of each of these varieties be made every two weeks from May 10 to July 15. This will ensure a continuous supply of delicious Sweet Corn from the latter part of June through until frost.

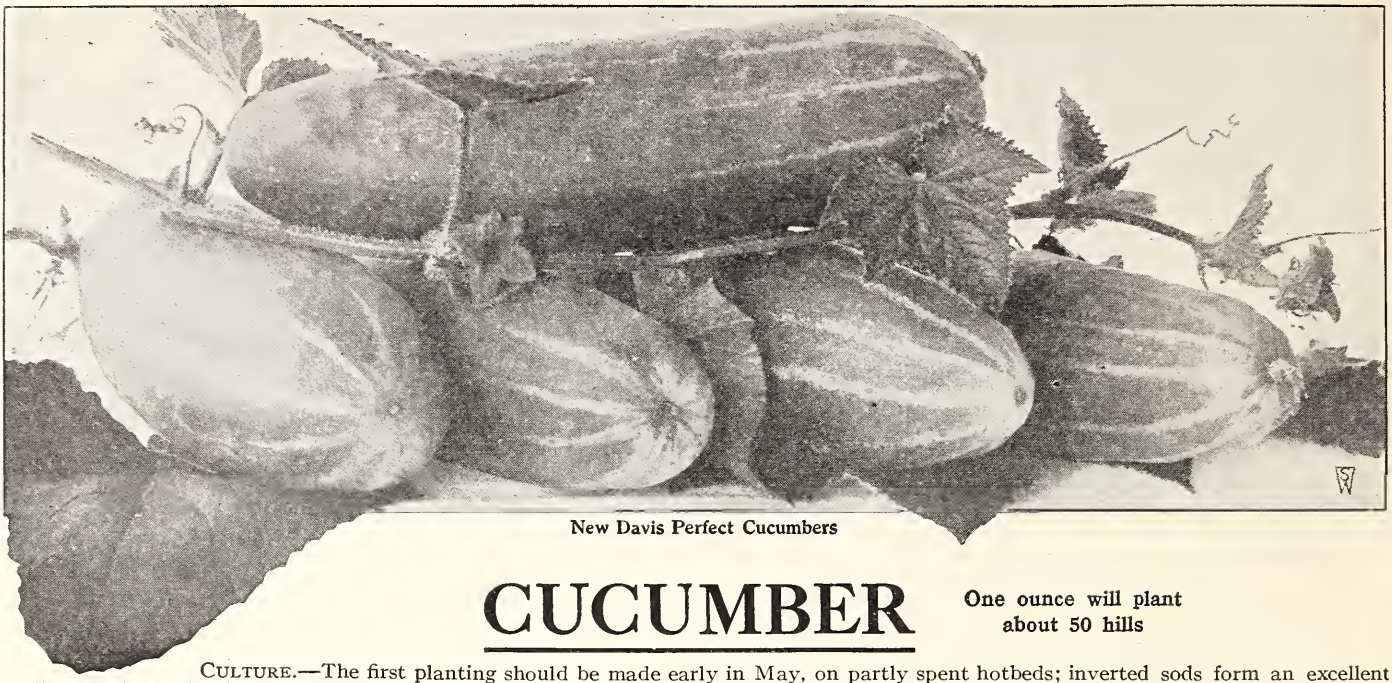
An explanation may be in order as to the meaning of the word "late" as applied to Sweet Corn and other vegetables. It does not mean that the variety should be sown late; it means that it takes longer to grow from seed than "early" sorts. It is quite the correct thing to sow "late" varieties early, and it is good gardening to sow "early" sorts late, the speed with which they mature enabling them to be used at a date when so-called "late" varieties would not have time to produce a crop.

COLLECTIONS:

One pkt. each of the above varieties, 35 cts. postpaid.
½ lb. each of the above varieties, 75 cts.
1 lb. each of the above varieties, $1.15.
2 lbs. each of the above varieties, $2.
5 lbs. each of the above varieties, $4.75.



Stowell's Evergreen Corn



New Davis Perfect Cucumbers

CUCUMBER

One ounce will plant about 50 hills

CULTURE.—The first planting should be made early in May, on partly spent hotbeds; inverted sods form an excellent medium for both planting on and carrying the young plants to their permanent location, or small paper pots can be used. Such plants are usually ready for transplanting to the open ground in from three to four weeks, and are seldom troubled with the striped bug. Transplanting, when practicable, should be done in the evening, into hills 4 feet apart each way. Thin out to about four plants to a hill when established. The seed may be planted in hills late in May, thus giving a succession. For pickles, plant during the last two weeks of June. Bug Death, or an infusion of hellebore powder in water, will destroy the striped bug.

New Davis Perfect. In color, a dark, glossy green; shape slim and symmetrical, with an average length of 10 to 12 inches. (See illustration.) Quality fine, as the seeds are very soft when fit for table use. Flesh tender and brittle, and of good flavor. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Improved Early White Spine. The fruits are nearly cylindrical in form, slightly pointed at the ends, perfectly smooth and of deep, rich coloring marked with distinct white lines at the blossom end. Will retain its color longer after pickling than most varieties, and is splendid as a table Cucumber. **Pkt. 10 cts., oz. 15 cts., ¼lb. 50 cts., lb. $1.50.**

Cool and Crisp. An excellent pickling or slicing Cucumber, of good size, tender and crisp; very early and exceedingly prolific. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

New Klondyke. This is a hybrid sort of the White Spine type which holds its dark green color longer than most other sorts. Averages 6 to 7 inches in size; ends are quite square and it is about 2 inches thick. Its extreme earliness, combined with its prolific and hardy qualities, make it a very desirable variety for either market or private use. An excellent sort for slicing. When small, this variety is also an excellent pickling sort. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Extra-Long Green. A well-known standard variety about 1 foot in length, of most excellent quality, and when young makes the best of pickles. When ripe it is the best of any for sweet pickles. Vines vigorous and very productive. Our strain of this valuable sort is unsurpassed by any, being carefully selected from the best fruits. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

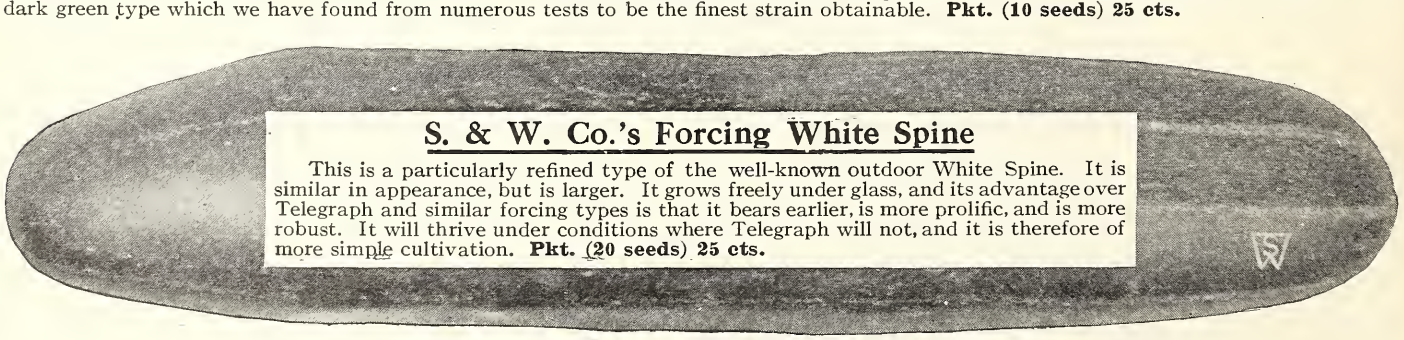
Japanese Climbing. Well adapted for pickling, as well as for slicing for salads. The great advantage of this variety lies in the fact that it can be trained on a pole or fence. The Cucumbers are a foot or more in length, with a smooth, dark green skin which turns brown and is netted when ripe. Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.

Fordhook Pickling. One of the best and most prolific varieties for producing pickles of medium size for both home or market use. Vines are very vigorous, yielding a large number of fruits; remaining in strong, healthy, growing condition longer than any other known variety. The skin is very tender and remains so when pickled. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Early Green Prolific. This sort can be used for slicing, but is best for pickling on account of its uniform small size. Pkt. 10 cts., oz. 20 cts., ¼lb. 55 cts., lb. $1.75.

CUCUMBERS FOR GROWING UNDER GLASS

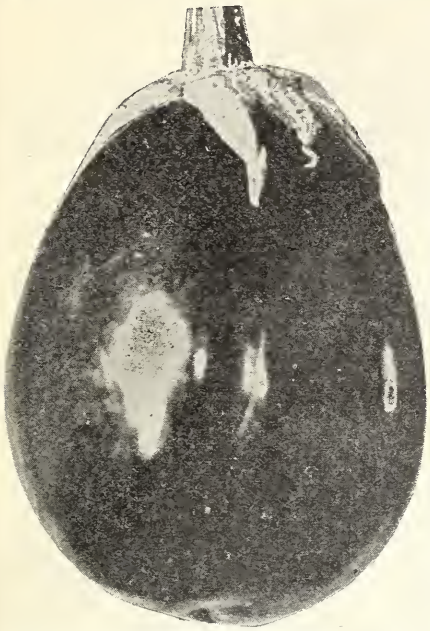
S. & W. Co.'s Improved Telegraph. By special arrangement, we have secured a selected strain of this variety, and have no hesitancy in saying we consider it equal to if not better than all other varieties. A very dark green type which we have found from numerous tests to be the finest strain obtainable. **Pkt. (10 seeds) 25 cts.**



S. & W. Co.'s Forcing White Spine

This is a particularly refined type of the well-known outdoor White Spine. It is similar in appearance, but is larger. It grows freely under glass, and its advantage over Telegraph and similar forcing types is that it bears earlier, is more prolific, and is more robust. It will thrive under conditions where Telegraph will not, and it is therefore of more simple cultivation. **Pkt. (20 seeds) 25 cts.**

S. & W. Co.'s Forcing. A new type for growing under glass



New York Improved Eggplant, much reduced. Fruits average 7 inches deep and 5 inches in diameter.

EGGPLANT

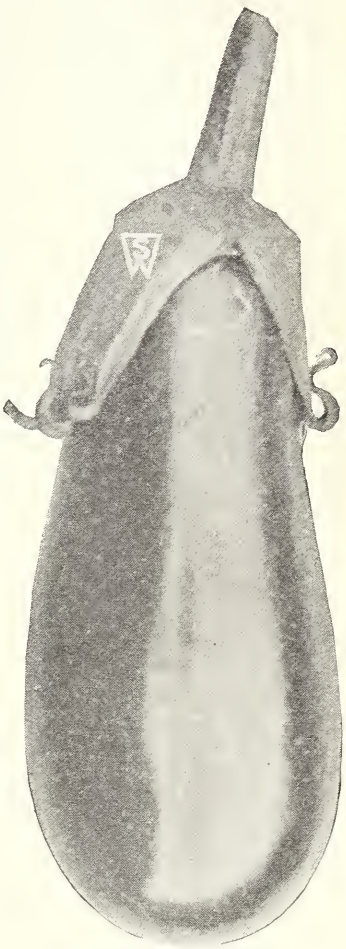
One ounce will produce about 1,000 plants

CULTURE.—One of the most delicious vegetables grown, yet it is not cultivated to the extent it would be if its superior table qualities were better known. Sow during March, in a warm hot-bed in light rich soil, or fill a shallow box with a similar mixture and after sowing place in the full light of a warm window. Transplant or thin so that the young plants stand 3 inches each way or, better still, put out individually into small pots. Always keep the young plants warm and do not plant out until settled fine weather has arrived. They need to stand 2 feet apart each way when put outside where they are intended to fruit.

New York Improved Spineless. This variety is more widely grown than any other and is a favorite both for the market-garden and for family use. The fruits are large, round-oval, of a rich deep purple-black color and splendid quality. The stems and calyx are entirely free from spines. In spite of their large size, the fruits are produced continuously and freely; each strong, spreading, bushy plant may be expected to yield from six to ten splendid "eggs." We offer a markedly superior strain of this fine variety. **Pkt. 15 cts., ½oz. 40 cts., oz. 70 cts., ¼lb. $2.50.**

Long Purple. In this type the fruits are 6 to 8 inches in length and 2 to 3 inches in diameter. In color they are a handsome dark purple. The variety is early and prolific. **Pkt. 15 cts., ½oz. 40 cts., oz. 70 cts., ¼lb. $2.50.**

Black Beauty. Is very much on the style of New York, but it is darker in color and has a higher polish. It is also broader and thicker. Pkt. 15 cts., ½oz. 45 cts., oz. 75 cts., ¼lb. $2.75.



Long Purple Eggplant. A very prolific and early sort

COLLARDS, GEORGIA

One ounce will produce about 3,000 plants

A cabbage-like plant with a large, loose head. In the South it is widely used as a cooked vegetable, being prepared in a manner similar to spinach. The seed may be started under glass during March and transplanted, being treated like early cabbage. For a late crop, sowings in the open ground during July or August are usual. Plants should be at least 3 feet apart each way. Collards are used as a substitute for cabbage in those sections where cabbage cannot be raised. **Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.**

CORN SALAD

One ounce will sow 150 feet of drill

CULTURE.—Seed may be sown thinly in drills 18 inches apart in early spring, and sowings may be made later for succession as required, although in hot weather it is difficult to obtain satisfactory results, hence late summer and early fall seedings are preferred. The young plants from the latest sowings are covered with a light mulch and wintered exactly as spinach is often managed. Rich soil is necessary. Among artificial fertilizers to be recommended is S. & W. Co.'s General Garden Fertilizer. This may be dug into the ground before seeding and later hoed frequently between the rows during growth, thus mixing it thoroughly with the soil.

Corn Salad. Widely used in winter in place of Lettuce

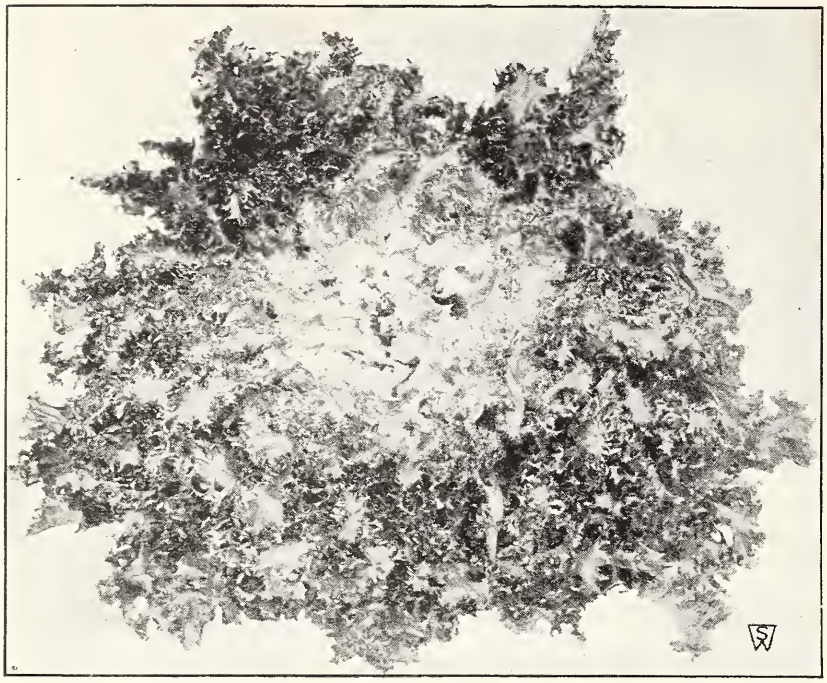
Large-leaved. Tested seed of high vitality. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

DANDELION

One ounce will sow about 100 feet of drill

CULTURE.—Sow early in the year in drills 1 foot apart, covering the seed no more than ¼inch. Thin the plants to stand 4 inches apart. Dandelion may be blanched like endive, for salad purposes, or it may be sown later in the season, plants covered lightly with salt hay, and the following spring they will be fit for use as early greens.

French Garden. Pkt. 15 cts., ½oz. 25 cts., oz. 45 cts., ¼lb. $1.50, lb. $5.



Green Curled Rose-Ribbed Endive. The most attractive of all autumn and winter salads

ENDIVE

One ounce will sow 200 feet of drill

CULTURE.—One of the most attractive of all autumn and winter salads. It is commonly known in restaurants as Chicorée, and is especially refreshing when served as lettuce with plain French dressing. Sow seed from middle of June till last of August. When the plants are fully grown, tie all the outside leaves together over the heart, to blanch the inner leaves, which will take about a week. Do not tie up when the leaves are wet, as they will then decay.

Green Curled Rose-Ribbed (Self-blanching). Quicker to mature and more upright in growth than the ordinary type. Grown 6 inches apart, in good, rich soil, the plants quickly crowd one another to such an extent that the dense centers of the plants blanch themselves. The flavor is refined to a degree. **Pkt. 15 cts., oz. 40 cts., ¼lb. $1.25, lb. $4.**

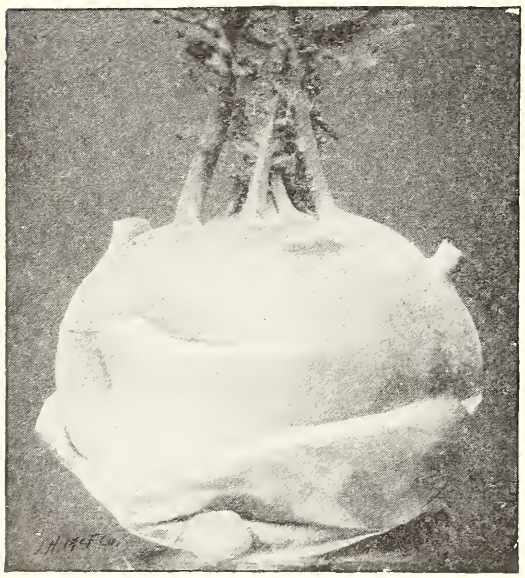
Escarolle (Broad-leaved Endive). Used widely as a salad and also like spinach

ENDIVE, continued

Green Curled. The hardiest and most vigorous variety. The leaves are bright green, finely cut and crinkled, giving the plant a handsome appearance. Blanches easily a creamy white. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

White Curled. A variety which blanches readily and is very tender when young. It is similar to Green Curled, but the leaves are naturally of a light golden tint, and it is not essential that they be tied up to blanch them for table use. The flavor is very good. Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.

Broad-leaved Batavian (**Escarolle**). The leaves are broad and thick, more or less twisted and waved, with round ends and are of a bright deep green with a nearly white midrib. They are much larger in size, thicker and more fleshy than those of the preceding sorts. The inner leaves form a fair head which blanches a creamy white. In its natural state Escarolle forms an excellent salad with an appetizing piquancy. It may be gathered fresh from the ground well into winter, thus furnishing salad at a season of the year when it is most welcome. Escarolle is also frequently served as spinach, when its flavor and health-giving properties render it of high value. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**



Earliest Selected Kohlrabi. Useful alike for forcing and for general culture

KALE

One ounce will produce about 300 plants

CULTURE.—Sow in May in shallow drills; when large enough, transplant singly into rows, allowing 24 inches between the plants.

Dwarf Green Curled Scotch. This withstands frost better than cabbage. In fact, it is not at its best until cold weather has set in. The leaves are curled like fine parsley. As boiled "greens," Scotch Kale is tender and of remarkably fine flavor. **Pkt. 10c., oz. 15c., ¼lb. 50c., lb. $1.50.**

Siberian Kale or **Sprouts.** Is not so densely curled as the Scotch, but is also hardy and yields a heavy bulk of produce. Widely known as "German greens." Seeds should be sown in September and treated like spinach; it is fit to cut early in spring. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. $1.25.

Dwarf Brown Kale. A beautiful curled variety, with spreading foliage; very hardy and of fine flavor. Pkt. 10 cts., oz. 15 cts., ¼lb. 50 cts., lb. $1.50.

KOHLRABI

One ounce will sow about 200 feet of drill

CULTURE.—This is a very delicious vegetable, and is increasing in popularity rapidly; combines the good qualities of the turnip and cabbage, but excels both in nutritive and productive qualities. Cooked the same as turnips, they are very tender and palatable. Sow in spring in rows 18 inches apart, and thin away the plants to 6 inches.

Earliest Selected (for frames). A variety with few and small leaves; can be planted very closely; very useful for general culture and indispensable for forcing. **Pkt. 15 cts., oz. 40 cts., ¼lb. $1.40, lb. $5.**

Early White Vienna. The earliest and best for either market or family use. Pkt. 10c., oz. 30 cts., ¼lb. 90 cts., lb. $3.

Early Purple Vienna. Similar to the preceding, except in color, which is of a bluish purple. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

LEEK

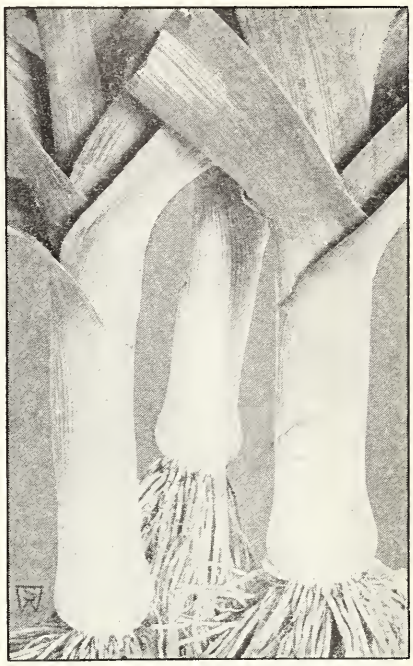
One ounce will sow about 100 feet of drill

CULTURE.—Sow the seed very early in a seedbed in a sheltered place, if possible. When plants are about 6 inches long transplant them to trenches 6 inches deep, with very rich soil at the bottom. Fill up the trenches as the plants grow, and later draw soil up to them. As a result you will have fine, large Leeks blanched half a foot long, which may be kept all winter if dug up with the roots on and stored in moist sand in the cellar.

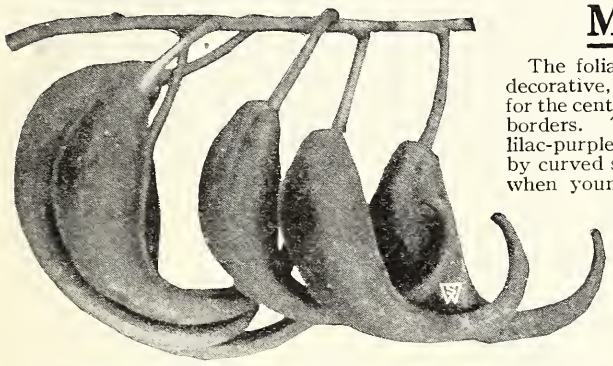
S. & W. Co.'s Exhibition. This is by far one of the best, long, blanched varieties we have ever offered. Seed furnished several prominent exhibitors in vegetable classes this past fall was pronounced quite the best they have grown. **Pkt. 25 cts., 5 pkts. $1.**

Large American Flag. A large-growing type, desirable in every way. On account of its dependability and ease of culture, is the most widely used variety for both family and market use. **Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.**

Musselburgh. (Winter.) A very hardy variety of extra-large size. The leaves are fan-shaped, of a dark green color. The edible stem is 6 to 8 inches long and 3 inches in diameter. Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.



American Flag Leek. The standard variety for general use



Martynia. The immature pods are used for pickles

MARTYNIA

The foliage of this plant actually is very decorative, and it may be used to advantage for the center of flower-beds or in mixed flower borders. The thick, succulent stems bear lilac-purple flowers, and these are followed by curved seed-pods. The pods are gathered when young and are pickled sweet, in the same manner as cucumbers. Sow the seed when frost is over, and thin the plants or transplant them to stand 3 feet or more apart; or, if preferred, sowings may be made under glass early in the season and the plants afterward planted in the open ground. **Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.**

MUSTARD

One ounce will sow 75 feet of drill

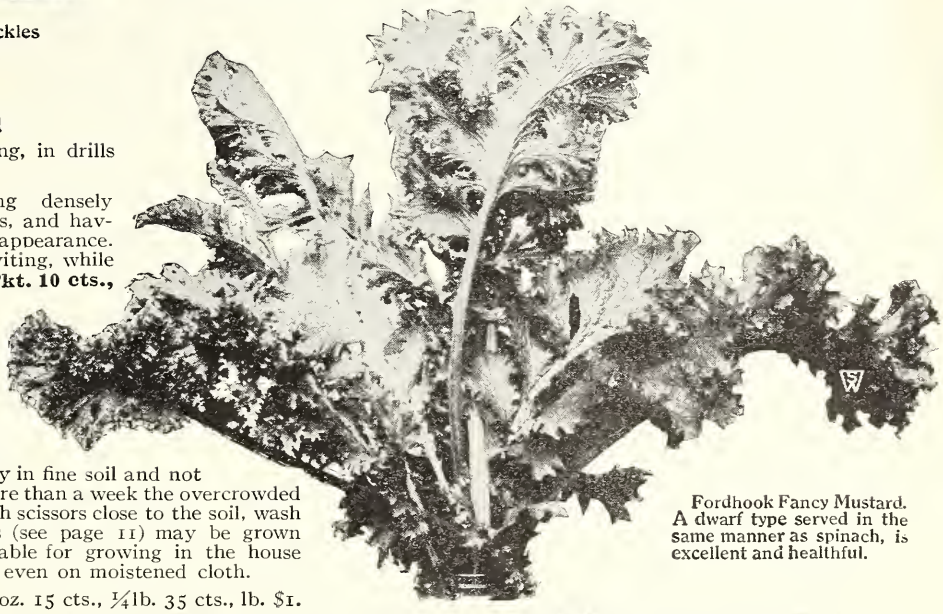
CULTURE.—Sow frequently through the spring, in drills from 8 to 12 inches apart.

Fordhook Fancy. A variety possessing densely crested and cut leaves, and having, in consequence, a handsome feathered appearance. Cooked and served as spinach, the flavor is inviting, while the plant possesses healthful tonic properties. **Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.**

Giant Southern Curled. The plant grows 3 feet tall, and the broad succulent leaves are cut and frilled. Pkt. 5 cts., oz. 15 cts., ¼lb. 40 cts., lb. $1.25.

THE USE OF MUSTARD. The large leaves of the above two varieties are boiled, forming a most palatable, piquant, and healthful type of "greens." White London is sown quite thickly in fine soil and not covered but pressed lightly down. In little more than a week the overcrowded seedlings are about 2 inches long; cut them with scissors close to the soil, wash and use for sandwich material. Curled Cress (see page 11) may be grown and used in the same manner. Both are suitable for growing in the house throughout the year in boxes of soil, sand, or even on moistened cloth.

WHITE LONDON MUSTARD. Pkt. 5 cts., oz. 15 cts., ¼lb. 35 cts., lb. $1.



Fordhook Fancy Mustard. A dwarf type served in the same manner as spinach, is excellent and healthful.

Three Aids to Successful Gardening

WHICH SHOULD BE INCLUDED WITH EVERY ORDER

MAG-O-TITE

Protects your crops against the ravages of the root-maggot, earth-worm, and other pests. Enables you to grow successfully Radishes, Cabbage, Kale, Onions, Turnips, Cauliflower, etc. Mag-o-Tite is a powder which is mixed with the soil at seeding- and planting-time, and later sprinkled alongside your plants when growing.

PACKAGES		SACKS	
2 lbs.	$0 40	25 lbs.	$3 00
4 lbs.	70	100 lbs.	9 50
8 lbs.	1 25		

Purchaser pays transportation

GARDEN FERTILIZER

Adds just those elements to the soil that are needed by all Vegetables and Flowers. Use at the rate of 10 pounds for a space 15 by 15 feet, or 500 pounds per acre. General Garden Fertilizer is an inoffensive powder which may be mixed with the soil before seeding and later dusted frequently between the rows during growth.

5 lbs.	$0 50	50 lbs.	$3 00
10 lbs.	90	100 lbs.	5 50
25 lbs.	1 75	Ton	75 00

We pay freight charges to your station in 100-lb. lots or over. In lesser quantities the purchaser pays delivery charges.

FARMOGERM

Supplies the nitrogen-fixing bacteria necessary for the successful growth of Beans, Peas, Sweet Peas, Alfalfa, Sweet Clover, Red Clover, Mammoth Clover, Crimson Clover, Alsike Clover, Vetch, Soy Beans, Cowpeas, Field Beans, Field Peas; also Mixed Garden crops. Separate cultures are offered for each of the above; state for which crop required.

Garden size (Peas, Beans, Sweet Peas only)	$0 50
1-acre size	1 00
3-acre size	2 50
12-acre size	9 00

Charges prepaid

LETTUCE

One ounce will sow 150 feet of drill

Because the number of good sorts of Lettuce is so great as to prove bewildering to the majority of home-gardeners, we have selected for them the following, which, in our many years of experience, have never disappointed where the cultural directions were followed.

CULTURE.—About the middle of March sow either Big Boston, May King, or Wayahead in the hotbed. When seedlings are about 2 inches tall, transplant them 4 inches apart each way in a coldframe. By May 1, after properly hardening them, set out in the garden, 1 foot apart in the row, with a 2-foot path between the rows. These plants should give you firmly folded, well-developed heads by Decoration Day. As soon as the ground can be worked outdoors, plant seeds of any of the early sorts in rows, ¼ inch deep. As soon as seedlings are 3 to 4 inches tall, thin them to stand 4 inches apart in the row. Later on remove every other one and do this again until the plants finally stand 16 inches apart in the row. Then hoe *between* the plants as well, in order to secure good heads. After the middle of May, do not sow seeds of early kinds, but select sorts like All Seasons and Iceberg instead. Make repeated sowings of short rows to have a crisp product available constantly.

EARLY LOOSE-LEAVED LETTUCES

Early Curled Simpson. A splendid curly-leaved sort. Seed sown in the coldframe about the middle of March and transplanted about the middle of April will supply the table from May until the middle of June. **Pkt. 5 cts., oz. 20 cts., ¼lb. 55 cts., lb. $1.75.**

Black-seeded Simpson (Loose Head). A popular curly-leaved sort, similar to Curled Simpson, except that it is larger in size. Pkt. 10 cts., oz. 20 cts., ¼lb. 55 cts., lb. $1.75.

Grand Rapids. There is no better forcing variety among the curly-leaved sorts than the Grand Rapids, and it is quite as good for outdoor culture as many others. Large, beautiful leaves; crisp and tender. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Grand Rapids Lettuce

TEN FINE LETTUCES

A suggestion in one of our prominent garden periodicals has given Ten Fine Lettuces for the amateur gardener to grow, whose garden space is small, and where crisp Lettuce is desired from April to October.

Golden Queen. A small variety of compact habit, forming yellowish green heads. Seed may be sown about the middle of April outdoors, giving Lettuce in about six weeks, just a few days before May King and about a day or so after Wayahead. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Wayahead. Large and fine. Very similar to May King described below. If seed is sown about the same time as Golden Queen, it will likely mature a few days sooner, but usually makes a looser head. **Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.**

May King. Unquestionably one of the best all-round, early, outdoor Lettuces. Does remarkably well in cold or wet weather, forming solid heads of bright green, the edges of the center leaves tinged reddish brown; the heart is clear yellow and of ideal flavor. If sown the same time as Wayahead, May King will be ready about four to five days later. This variety is sown in August for fall use. **Pkt. 10c., oz. 25c., ¼lb. 80c., lb. $2.50.**

May King Lettuce

California Cream Butter. The largest and latest of the early varieties of this type named in this list. If sown the same time outdoors as the three preceding, will mature about ten days to two weeks later. **Pkt. 10 cts.. oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Big Boston. A splendid head Lettuce, perhaps the most generally and favorably known of the ten mentioned here. Forced in frames to great extent in the spring and is also planted in August for late crop. Does not do well for midsummer use, but as a fall or early spring Lettuce is one of the best. Large heads; center crisp and of fine flavor. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

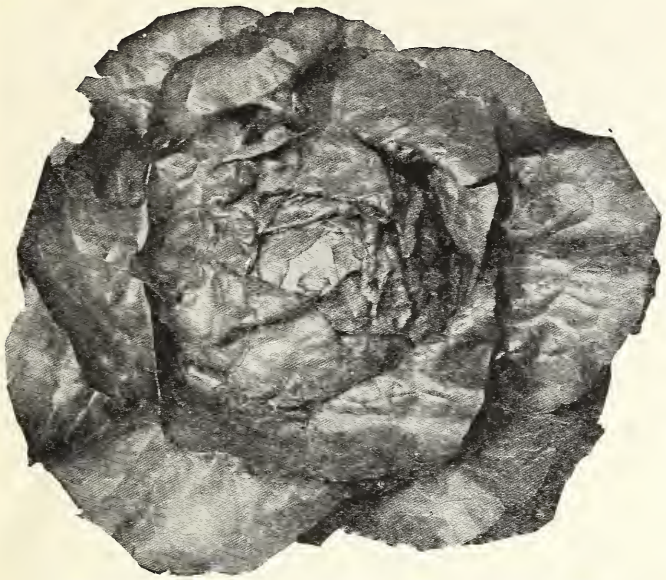
Green-Leaved Big Boston (**Black Seeded**). By far the most heat-resisting sort of this type. The plants are of a uniformly darker shade of green, grow more compactly, and stand several days longer than other strains of Big Boston, before running to seed. **Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.**

All-Seasons. May be described as a black-seeded Deacon. A good heat-resister. If sown early in May will produce fine, buttery Lettuce from the latter part of June to the latter part of July. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Iceberg. (**California Simpson.**) A splendid, crisp-head sort: Few Lettuces resist the heat better. Has strong center ribs, which bend toward the heart of the plant, keeping it thoroughly blanched. Repeated sowing from early May, of this sort and New York or Wonderful, at intervals of three weeks, should supply the table well up to September 1. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

New York, or Wonderful. This variety grows considerably larger than Iceberg and matures about ten days later. The outer foliage is a distinct, dark green as compared with the yellowish green of Iceberg. **Pkt. 10 cts., oz. 30 cts., ¼lb. $1, lb $3.50.**

Crisp as Ice. Perhaps the least known of the three remarkable crisp-head varieties. The hardiest of all the Lettuces, sometimes remaining in the garden until Thanksgiving. Heads somewhat globe-shaped; dark green and bronze; the heart, however, is splendid. **Pkt. 10 cts., oz. 30 cts., ¼lb. $1, lb. $3.50.**



Big Boston. Everybody's Favorite for outdoor use and forcing

OTHER GOOD HEAD LETTUCES

Mammoth Black-Seeded Butter. A very large type The heart is of fine flavor and melting. Mammoth Black-seeded Butter is advised for late spring and summer planting, as it is a good hot-weather variety, being one of the last to "bolt" to seed. **Pkt. 10c., oz. 20 cts., ¼lb. 65 cts., lb. $2.**

Hanson Improved. The round head is large and well-formed, and is so solid it blanches almost white. The outer leaves are curled and shining, giving the Lettuce a very handsome appearance. This variety is recommended because of its absolute reliability. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

Mignonette. A densely heading curled Lettuce of medium size and one that is very solid, compact, and hard. It is medium brown in color, with a dark greenish tinge. Mignonette is very popular in many sections on account of its high quality and its wonderful resistance to heat, it being one of the last varieties to run to seed. Pkt. 10 cts., oz. 22 cts., ¼lb. 80 cts., lb. $2.50.

Black-seeded Tennisball. Forms a close solid hard head of a buttery texture: not over large in size and of a medium green color The leaves are crumpled. Tennisball enjoys wide popularity, chiefly because it is a sure header during spring, summer and fall. Pkt. 5 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

Salamander Perfected. An excellent summer variety. Grows to large size, with tightly folded leaves covering the center, which blanches a light golden. Pkt. 5 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

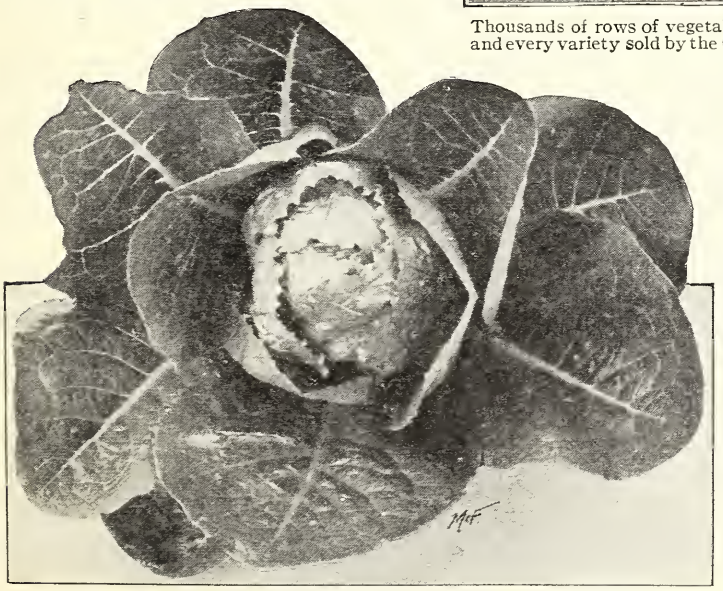
Unrivaled Summer. Forms uniformly large heads similar to Big Boston but lighter in color. Ready about a week earlier than Big Boston when sown at same time. May be sown throughout the season. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

A MINIATURE LETTUCE

S. & W. Co.'s Tom Thumb.

This miniature sort is just what the gardener wants for greenhouse or frame culture. The small, firm, cabbage-shaped heads are of excellent buttery quality, while the leaves are dark green and very crumpled. The owner of the small garden likes the tiny plants, which occupy but little space. Outdoors it is suitable for spring and fall use. The plant is practically all head. **Pkt. 15 cts., oz. 35 cts., ¼lb. $1.25, lb. $4.**

Thousands of rows of vegetables and flowers are grown to maturity on the S. & W. Co.'s Trial-Grounds, and every variety sold by the Company is represented. Our view shows a portion of the Lettuce Trials 1909



Paris White Cos Lettuce, or Romaine. Crisp, tender, and sweet

COS or ROMAINE LETTUCE

This is of upright growth, quite distinct, and is considered by most growers to be the most refined type of Lettuce. When about a week short of maturity, it is usual to draw the outer leaves together and tie them, blanching the inner heart and greatly enhancing its noted crispness and fine flavor. Experts for some years have been developing plants which naturally tend toward a close, compact habit, and the necessity for tying is not so great with the following three varieties as with the older forms. In spite of this, it is always worth the trouble to tie up at least some of one's Cos Lettuces.

S. & W. Co.'s Giant White. Although this fine Cos Lettuce attains a large size, the immense heart is crisp, tender and excellent; habit quite self-folding. A splendid early sort. **Pkt. 25c., ½oz. 60c., oz. $1.**

Paris White Cos, or Romaine. A splendid sort for summer use, leaves quite erect. **Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.**

Trianon Self-closing Cos. A large, strictly self-folding type with long, narrow, oval leaves. The oval head is tender and crisp. Trianon is several days earlier than the above varieties, making it of value to the commercial man. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

MUSKMELON

One ounce will sow about 80 hills

CULTURE.—Sow the seed in April under hand glasses, and in the open air in May in hills 6 feet apart each way. Plant in each hill from 8 to 10 seeds, covering half an inch deep. When the plants have produced their rough leaves, thin out to three plants. The hills should be prepared by trenching in rotten manure and sand. As soon as the plants make their appearance above ground, dust them with soot, charcoal dust or Bug Death, to prevent the ravages of the bug.

GREEN-FLESHED KINDS

S. & W. Co.'s Selected Stock, Rocky Ford.

This famous variety is the finest early green-fleshed melon in cultivation. The fruits are remarkably uniform in size, weighing from 1¾ to 1½ pounds each. They are quite thick meated, with very thin rinds; skin light green, regularly ribbed and heavily netted, turning to a golden yellow as the melon ripens. Flesh light green in color, firm but melting, and of uniformly fine flavor. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Honey Dew. This variety, with its clear light yellow skin, is becoming quite familiar in the best markets. No other melon is quite so sweet as this, and it is not surprising that it should become so popular. The flesh is green, very thick, and unlike some Melons it ripens uniformly to the rind. Pkt. 15c., oz. 40c., ¼lb. $1.40, lb. $5.

Montreal Improved Nutmeg. This variety grows to a large size. It is beautifully netted and deeply ribbed. Its flesh is light green, melting, and of exquisite flavor. The best melon in cultivation. Our stock is true and was grown under glass from selected fruit by the most successful Canadian shipper. Pkt. 25c., ½oz. 90c., oz. $1.50.

Jenny Lind. Small, but very early; green flesh. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

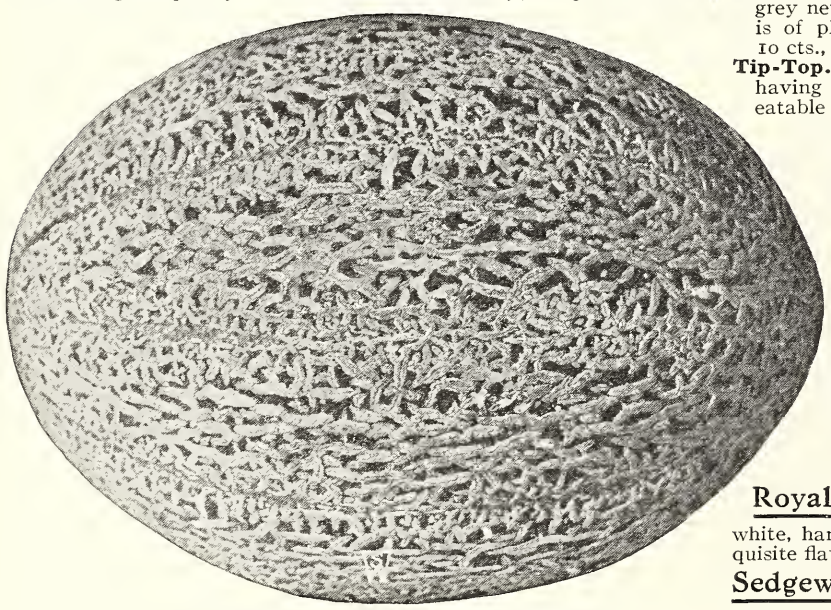
Extra-Early Hackensack. Large, round and of fine quality; a standard variety. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

10/25 Salmon-Tint. (See Novelties, page 4.) Pkt. 15 cts., oz. 40c., ¼lb. $1.25, lb. $4.

GOLDEN or ORANGE-FLESHED SORTS

Admiral Togo. This is an orange-fleshed Netted Gem, or Rocky Ford. We have developed in the Admiral Togo a small Muskmelon with the very thick, orange flesh and splendid quality of the Defender, and possessing the characteristic netting, shape, size, and shipping quality of Netted Gem or Rocky Ford. Combining all the good qualities of those two fine varieties, we believe the Admiral Togo is an ideal table and basket melon. **Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.**

Banana. Narrow, curved, and as much as 30 inches in length, this old-time variety is well named. The flesh is a deep salmon, sweet, and of good quality. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.



Admiral Togo. An ideal orange-fleshed Melon

S. & W. Co.'s Selected Stock, Rocky Ford. The most popular green-fleshed Muskmelon

Hoodoo. A new orange-fleshed variety, ideal as a shipping melon and of the very finest quality. Vine vigorous, remarkably blight-resisting and very productive. Fruits uniformly of medium size. Netting exceptionally fine and dense, extending practically over the entire surface. Rind thin yet very firm, so that the melons arrive in perfect condition in distant markets. Flesh very thick, firm, highly colored, of fine texture and delicious flavor. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

Osage or **Miller's Cream.** This is a large-fruited, dark-skinned Melon, the appearance of which is much enhanced by the shallow grey netting which covers it so evenly. The very thick red flesh is of pleasing flavor. A very popular main-crop variety. Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.

Tip-Top. The most productive melon known; good for early or late, having a sweet, juicy, fine flavor; solid flesh (but not hard) and eatable to the outside coating. The fruit is of large size, nearly round, evenly ribbed and moderately netted. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

Paul Rose. This new red-fleshed Melon is sweet and highly flavored, and in it are combined all the good qualities of the Netted Gem and Osage, the varieties from which it originated. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

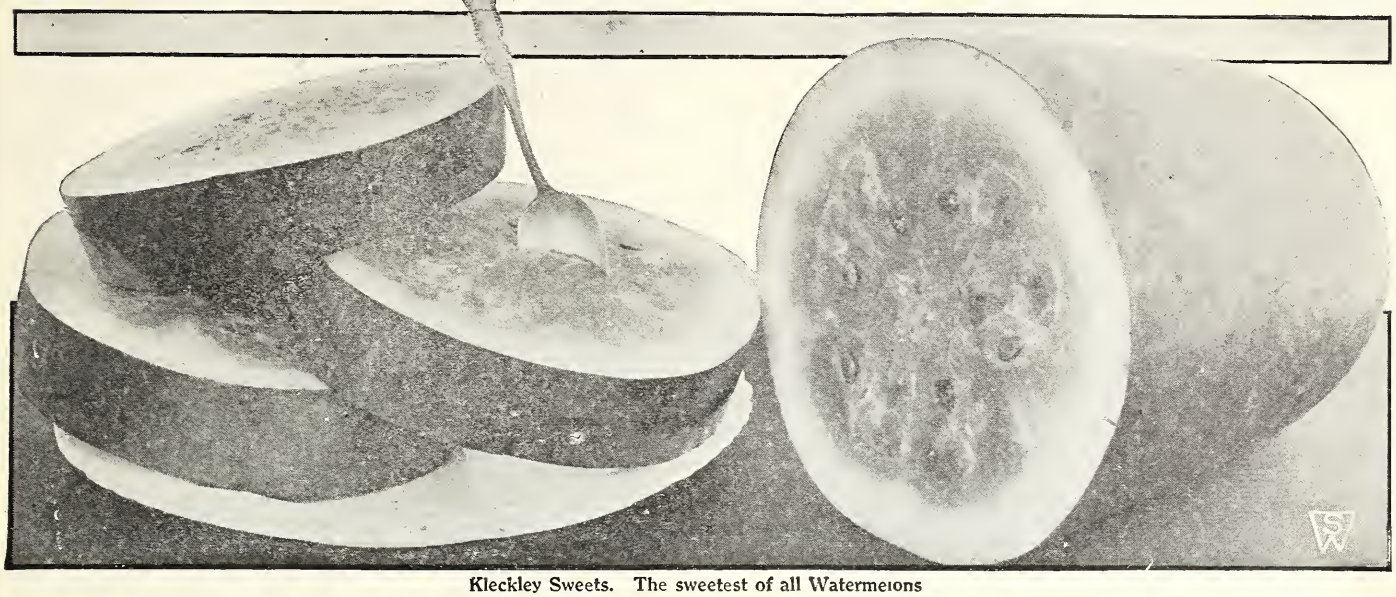
Cassaba Muskmelon

To the lover of Muskmelons, it is a matter of disappointment that the varieties ordinarily grown will not keep for any length of time after ripening. Cassabas, however, *will keep*, and they are true winter melons. Their cultivation is similar to that of muskmelons, except that they are, perhaps, a little more exacting in the matter of soil. **Pkt. 15 cts., oz. 35 cts., ¼lb. $1.25.**

FORCING MELONS

Royal Jubilee. A splendid, oval, green-fleshed melon, raised at the Royal Gardens, Windsor. Skin almost white, handsomely netted. The flesh is tender and of the most exquisite flavor. **Pkt. 50 cts.**

Sedgewick Gem. A new English variety of sterling merit. Skin dark green, heavily netted; flesh orange and of wonderful flavor. **Pkt. 50 cts.**



Kleckley Sweets. The sweetest of all Watermelons

WATERMELON

One ounce will plant about 50 hills

CULTURE.—Treat the same as muskmelon, except that they should be planted 8 to 10 feet apart, according to variety.

Cole's Early. A most delicious and productive variety for the family garden, succeeding in northern states, where melons were never matured before. The flesh is of a beautiful bright red color, crisp and extremely delicate in texture—that granulated, cool, sparkling appearance that is so captivating to the eye; in flavor it is lusciously sweet and refreshing, no pithiness or stringiness. **Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.**

Kleckley Sweets. **The sweetest of all the Watermelons.** Fine-flavored and grained, tender meat. Fruits are large size; rind very thin and green, very brittle; flesh scarlet and firm; and a variety everyone should grow. **Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.**

Early Fordhook. The quickest-maturing, large-fruited Watermelon grown, and therefore suitable for the more northern parts of the country. The fruits are short and "stubby" in form, though large. The dark green skin is occasionally flecked with faint stripes of a lighter color, and the bright scarlet flesh is crisp and of such splendid quality as to warrant our recommending it to our customers. It is a variety which ships well. Pkt. 10c., oz. 30c., ¼lb. 90c., lb. $3.

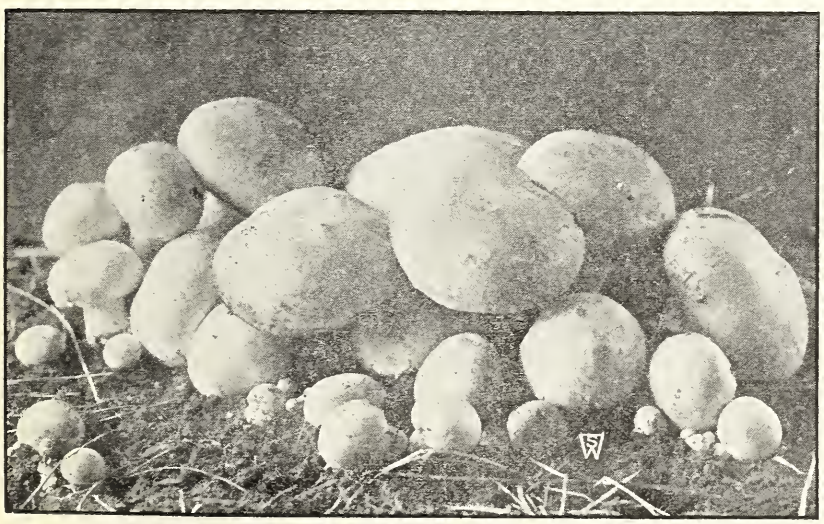
Tom Watson. A large, long melon, with a tough rind. Vines vigorous and productive; flesh rich red, sweet, and tender. Pkt. 5 cts., oz. 15 cts., ¼lb. 50 cts., lb. $1.50.

Citron. Round and handsome; used for preserves. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

MUSHROOM SPAWN

Ten bricks will spawn 10 feet square

CULTURE.—"I have the fresh horse droppings saved until a sufficient quantity accumulates to fill the beds, occasionally turning the manure and watering it slightly if it appears not to be moist enough. Then I leave the mass for three days, after which I again turn it, adding more water if necessary. After turning, I firm the manure, and in three days again repeat the operation. The most particular part is to get the manure moist enough and yet not too moist. After the second turning the manure is generally ready for the bed. My beds are only 10 inches in depth. I press in the manure very firmly, and cover slightly with salt hay or straw, which tends to retain the moisture in the bed. When the temperature of the bed drops to 85°, I insert 'Pure Culture' Spawn in pieces about the size of an egg, 1 foot apart one way and 9 inches the other. I insert the Spawn just deep enough to cover with a little manure. I keep the temperature of the house between 55° and 60°, and occasionally dampen the walls, etc., as required; also occasionally 'dew' over the hay covering the bed with warm water. If the Spawn runs properly, a white, frothy substance will be observed in about ten days or two weeks. I then remove the hay and cover with one-inch thickness of sifted soil, preferably good pasture loam, firming it down. Mushrooms will generally appear in from six to eight weeks. I always have a little finely sifted soil on hand, and fill all the holes up after gathering the Mushrooms—that is, the holes made by removing the stalks. With good care the bed will last three months. Should it appear dry, water thoroughly with water heated to 90°, in which a pinch of nitrate of soda dissolved will be found very beneficial. In conclusion, I may say I think most of the failures in mushroom-growing arise from the manure being too dry."—JOSEPH ROBINSON.



Bed of S. & W. Co.'s Pure Culture Mushroom Spawn

American Pure Culture Spawn

Ten pounds will spawn 10 square feet

This type produces larger Mushrooms than the English, coming into bearing somewhat earlier, and continuing to crop for a long time. This spawn is produced by selecting spores from individual specimen Mushrooms, and is propagated and transferred to the bricks of manure, which, when planted, produce Mushrooms all of one type.

Per Brick (about 1½ lbs.) 35c. **Per 10 Bricks,** $3.25.
Per 25 Bricks, $7. **Per 100 Bricks,** $25.

English Mushroom Spawn. As most growers of Mushrooms recognize the superiority of the American Pure Culture over the English, we have decided to discontinue handling the latter.

ONIONS

One ounce for 100 feet of drill; 5 to 6 pounds per acre

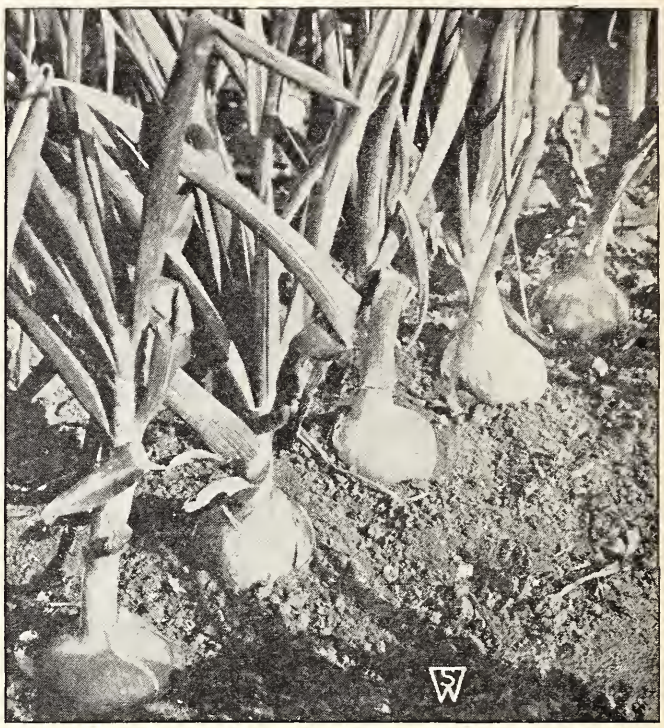
CULTURE.—Sow in rich, sandy soil, in drills 1 foot apart, as early as possible in the spring, cover with fine soil and firm well, either with roller or back of spade. When plants are strong enough, thin out to 3 or 4 inches. The finest Onions are produced by sowing the seed in a hotbed early in February and transplanting seedlings to the open ground 6 inches apart.

MILD, WHITE VARIETIES

S. & W. Co.'s Southport White Globe. Yields abundantly, producing handsome and uniformly globe-shaped bulbs. The flesh is firm, fine-grained and of mild flavor. To produce the beautifully white Onions, so much sought in every market, one must, first of all, have good seed. Second, grow them well on rich land. Third, exercise great care in harvesting and curing the crop. In Southport, they "cord" up the Onions in long rows, the bulbs on the inside, and cover with boards so that the bulbs in the open air are well protected from rain or dew, which would be sure to discolor them. We have, by years of careful selection and breeding, developed a strain which has no equal in uniformity and beauty of shape and color. **Pkt. 10 cts., ½oz. 25 cts., oz. 40 cts., ¼lb. $1.25, lb. $4.50.**

White Pickling. When matured, the tops die down, leaving beautiful and perfect little bulbs. The color is pure white, flavor mild and delicate, perfectly adapted for pickling and table use; and makes a pretty bunch Onion, especially if grown by the transplanting method. A valuable variety. Pkt. 15 cts., ½oz. 30 cts., oz. 45 cts., ¼lb. $1.50, lb. $5.

White Portugal, or Silverskin. A mild-flavored variety, used extensively for pickles. The Onions are tender and altogether fine. **Pkt. 10 cts., ½oz. 25 cts., oz. 40 cts., ¼lb. $1.25, lb. $4.50.**



White Portugal Onions

LEADING YELLOW KINDS

S. & W. Co.'s Southport Yellow Globe. The enormous quantities of this Onion annually sent to market prove its popularity, and it is more largely grown than any other sort. We can confidently claim superiority for our strain of seed; it produces large and uniformly spherical bulbs with very small necks. The largest diameter is below the center of the bulb. The color is a rich orange-yellow. Keeps splendidly. **Pkt. 10 cts., oz. 30 cts., ¼lb. 85 cts., lb. $2.75.**

Collection

One packet each, three varieties Southport Globe Onions,

RED, WHITE, YELLOW,

for 25 cents.

Ideal Yellow Globe. An Onion of the Southport type, but, as the result of very careful selection over a period of years, representing all that a general-purpose Onion should be. We recommend other and larger sorts for exhibition purposes, but where the requirements are high quality, mildness of flavor, maximum keeping qualities, and maximum yield over a given area, here is the Onion for you to grow. **Pkt. 15 cts., ½oz. 30 cts., oz. 45 cts., ¼lb. $1.50, lb. $5.**

Yellow Globe Danvers. Of more globular shape than the Southport; a splendid keeper, producing well-rounded bulbs about 2½ inches in diameter; skin light golden yellow; flesh white, crisp, and mild in flavor. One of the best-known Onions, and recommended strongly for the general crop. Pkt. 10 cts., oz. 25 cts., ¼lb. 75 cts., lb. $2.25.

S. & W. Co.'s Southport Globe Onions

EXTRA LARGE-GROWING KINDS

S. & W. Co.'s Selected Ailsa Craig. This Onion continues to be one of the largest, when stock is good and if sown early. It is a very handsome, oval-shaped variety with pale straw-colored skin. Two of these Onions have been exhibited in England that weighed 8 pounds, and in some parts of Massachusetts it attains a weight of 3 pounds 4 ounces. For exhibition it is unexcelled, and a more shapely bulb than the Prizetaker. To attain its largest size it should be sown in the greenhouse in January and transplanted to the open in April. For a large Onion it is a splendid keeper, and for those who like an Onion raw we recommend it highly on account of its mild flavor and crystal wax-like appearance. **Pkt. 20 cts., ½oz. 45 cts., oz. 75 cts., ¼lb. $2.50, lb. $9.**

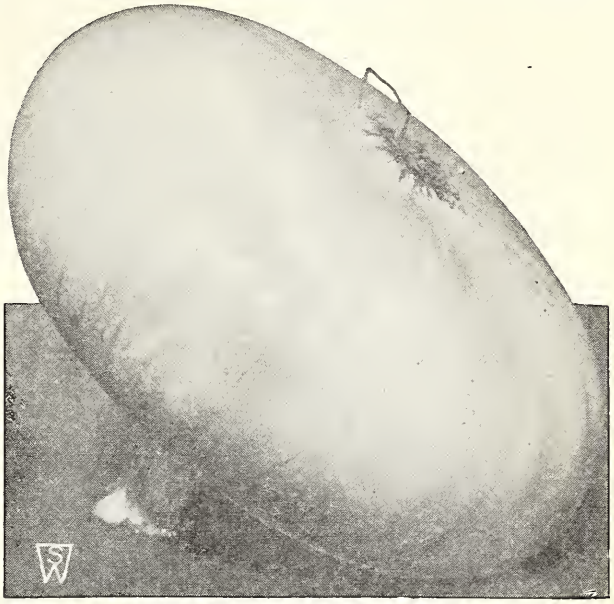
Gigantic Gibraltar. See Novelties, page 4. Pkt. 15 cts., ½oz. 35 cts., oz. 60 cts., ¼lb. $2, lb. $7.

Prizetaker. Grows uniform in shape; is of immense size, measuring from 12 to 16 inches in circumference, while under special cultivation specimen bulbs have been raised to weigh from 2 to 3 pounds each; its pure white flesh is fine-grained, mild, and delicate in flavor. Pkt. 15 cts., ½oz. 30 cts., oz. 45 cts., ¼lb. $1.50, lb. $5.

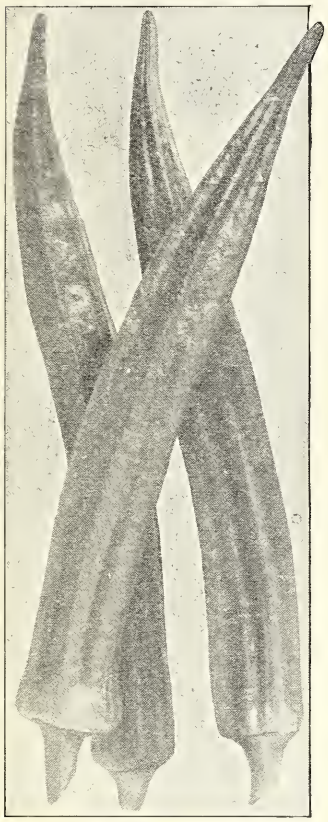
LONG-KEEPING RED ONIONS

S. & W. Co.'s Southport Red Globe. Very similar to Wethersfield in color, having a deep red skin, but differing in shape, being almost a perfect globe. Size large, flesh fine-grained, mild and tender. **Pkt. 10 cts., oz. 30 cts., ¼lb. 85 cts., lb. $2.75.**

Large Red Wethersfield. This is the standard red variety, and a favorite onion in the East, where immense crops are grown for shipment. Bulb large, somewhat flattened, oval shape; skin deep purple-red; flesh purplish white, moderately fine grained and stronger flavored than any of the other kinds. Very productive, the best keeper, and one of the most popular for general cultivation. It is more inclined to form large necks if planted on unsuitable soil than the Danvers, but is the best variety on poor or dry soil. **Pkt. 10 cts., oz. 25 cts., ¼lb. 75 cts., lb. $2.25.**



Large Red Wethersfield Onion



Okra

BERMUDA ONIONS

These are large, flat, quick-growing types, with a pleasant, mild flavor. We offer new-crop imported seed.

Red Bermuda. Pkt. 10 cts., oz. 35 cts., ¼lb. $1, lb. $3.

White Bermuda. Pkt. 10 cts., oz. 35c., ¼lb. $1, lb. $3.

ONION SETS

Sets will produce green, bunch or full-grown onions much quicker than will seed. Multipliers, Potato Onions, and Shallots divide and increase in the soil. Egyptian Onions are hardy perennials, yielding green onions every spring.

	Qt.	½pk.	Pk.
White Onion Sets	$0 35	$1 30	$2 50
Yellow Onion Sets	30	1 10	2 00
Red Onion Sets	30	1 10	2 00
White Multiplier Onions	40	1 50	2 75
Yellow Potato Onions	30	1 10	2 00
White Potato Onions	$0 30	$1 10	$2 00
Shallots	40	1 50	2 75
Egyptian Top Onions (Fall delivery)	30	1 10	2 00

Garlic Sets

One pound will plant 200 feet of drill

CULTURE.—Garlic is used for a variety of flavoring purposes. Break up the sets or bulbs into the smaller scale-like portions and plant these 6 inches apart in rows 1 foot apart. As soon as the leaves have turned, the crop is matured, and may be harvested like the onion.

Garlic Sets. Lb. 50 cts., 5 lbs. $2.25.

OKRA, or GUMBO

One ounce will sow about 100 feet of drill

CULTURE.—Sow when the weather is warm and settled, in drills 1 inch deep and 4 feet apart; thin out to 12 inches apart in the drills. Okra requires 9 or 10 weeks from seed to maturity. Usual sowing period for New York, May 25 to June 10.

Lady Finger. A new variety from the South, very productive; extra-long, slender pods of fine round form. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. $1.25.

Kleckley's Favorite. One of the best varieties. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. $1.25.

Long Green. Long ribbed pods; very productive. Pkt. 10 cts., oz. 15 cts., ¼lb. 35 cts., lb. $1.

White Velvet. Very distinct in appearance; pods are perfectly round, smooth and of a white velvety appearance and of superior flavor. Pkt. 10 cts., oz. 15 cts., ¼lb. 50 cts., lb. $1.50.

Globe Onion Sets

PARSLEY

One ounce will sow about 150 feet of drill

CULTURE.—Parsley requires a rich, mellow and deep soil. Soak the seed for a few hours in tepid water, and sow early in the spring in drills 1 foot apart and ½inch deep. Thin out the young plants to 4 inches. Hamburg Parsley should be treated the same as carrots.

Extra Double Curled. A standard market variety, used for garnishing and flavoring. The leaf is finely cut and curled and a vivid green in color. Handsome. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. $1.25.

Champion Moss Curled. A particularly beautiful type. As its name implies, a bed of this has the appearance of fine moss. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. $1.50.

Exhibition Curled. See Novelties, page 4. Pkt. 25 cts., 5 pkts. $1.

Fern-leaved. This is a distinct variety very different from the foregoing. We have the true type. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

Extra Double Curled Parsley

Champion Moss Curled and Plain Parsley compared

PARSLEY, continued

Plain. Known widely as Italian Parsley. Used for flavoring. (See illustration.) Pkt. 5 cts., oz. 15 cts., ¼lb. 50 cts., lb. $1.50.

Hamburg or **Rooted.** The roots of this type resemble parsnips. They are served similarly or used for flavoring soups. Pkt. 10 cts., oz. 20 cts., ¼lb. 65 cts., lb. $2.

PEANUTS

CULTURE.—These require similar soil conditions to garden corn, and they take about as long to grow. Remove the outer shell carefully, taking care not to damage the kernels, and sow the latter in drills 2½ feet apart and 1½ inches deep. Allow 9 inches between one "nut" and the next in the row.

Improved Spanish. Though small, this is a quick-growing sort and is therefore particularly suitable for northern gardens. Pkt. 15c., lb. 45c.

California Long Red. Larger than the above but slower to mature. Plant this variety south of the latitude of New York. Pkt. 15 cts., lb. 45 cts.

PARSNIP

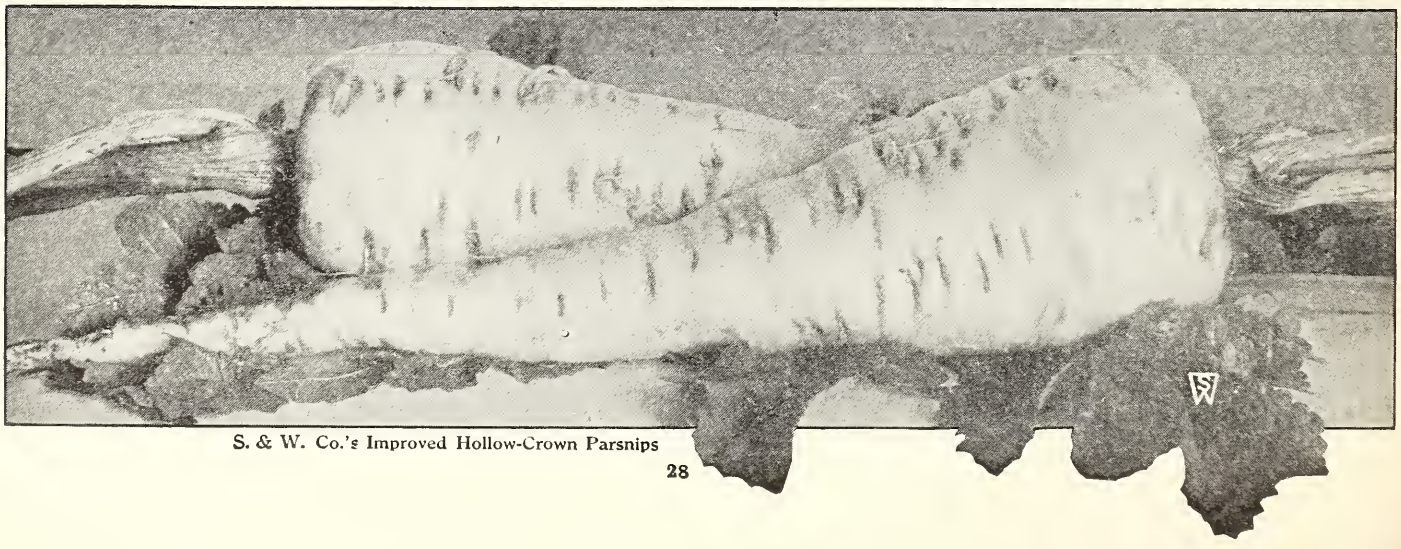
One ounce will sow about 200 feet of drill; 5 to 6 lbs. for an acre

CULTURE.—Sow as early in spring as the ground can be worked, in drills 18 inches apart, covering with fine soil to the depth of ½inch The soil should be rich and deeply dug. The quality of the roots is much improved after a severe frost; in fact, they may be allowed to remain in the ground throughout the winter, as they are perfectly hardy.

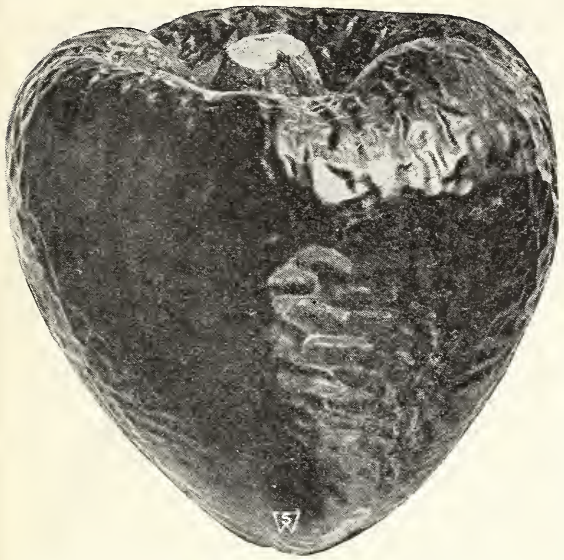
S. & W. Co.'s Improved Hollow-Crown. A great improvement over the present Hollow-Crown variety; clean, well shaped and smooth. Smoothness in the root of a Parsnip is a matter of importance, as every housewife preparing it for the table will acknowledge. Excellent for table or exhibition. **Pkt. 10 cts., oz. 20c., ¼lb. 55c., lb. $1.75.**

S. & W. Co.'s New Intermediate. The root is somewhat flattened and top-shaped, about 6 inches long and 4 inches across the thickest part. It matures quickly and is therefore suitable for sowing as a second crop, following spinach or lettuce; or if put in when long parsnips are sown, may be pulled soon after midsummer. Particularly suitable for shallow land which ordinarily produces misshapen or fanged root-crops. **Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.**

Selected Exhibition. See Novelties, page 4. Pkt. 25 cts., 5 pkts. $1.



S. & W. Co.'s Improved Hollow-Crown Parsnips



Perfection Pimiento. A fine variety, unique in shape and in its fine qualities

PEPPER

One ounce will produce about 1,000 plants

CULTURE.—Peppers are more sensitive to frost than most vegetables, and they should not be planted out until settled warm weather has arrived. The seed should be sown in a hotbed, coldframe, or if no better convenience is available, a box in a window; transplant later into rows 20 inches apart each way, and keep the soil clean and well stirred.

SEVEN SPLENDID SWEET PEPPERS

Perfection Pimiento. One of the best for the home-garden, both green and ripe. It is so smooth and uniform in shape that the skins can be easily slipped off after heating over a hot fire a few seconds or by boiling a few minutes in hot water. It can also be pared like an apple by using a sharp knife. The green Peppers can be pared best in this way. The hull or meat is from 2 to 3 times as thick as that of the Bell types, and yields about a half more edible product to the same measurement. The quality is very sweet and delicious and entirely free from pungency. In color, when ripe, it is a beautiful scarlet-red. It is very productive, yielding heavy crops until cut off by frost. This Pepper will be much sought and grown by canners for pimientos, pickles and pulp. **Pkt. 15 cts., ½oz. 45 cts., oz. 75 cts., ¼lb. $2.75.**

Chinese Giant. This is the standard large sweet Pepper. It is quite early to ripen and very productive for so large a variety. Productiveness may be increased by pinching the first or "king" blossoms which appear. They grow 4 or 5 inches broad at the top, and are of equal length. Quite uniform in size. The flesh is mild and unusually thick and makes an excellent salad sliced and served like tomatoes. Color green, changing to a glossy scarlet when ripe. **Pkt. 15 cts., ½oz. 55 cts., oz. 90 cts., ¼lb. $3.**

Neapolitan (Jersey Sweet; White Cap). The two qualities which this Pepper possesses are its *earliness* and its *extraordinary yielding properties.* It is an upright-growing variety, that is, its fruits grow upwards and are not pendant. They are bright red, sweet, fine, and very tender. Commercial growers favor this Pepper, and find that it is in particular demand with pickling establishments. **Pkt. 15 cts., ½oz. 45 cts., oz. 75 cts., ¼lb. $2.75.**

Early Dwarf Red Squash (Cheese Pepper). A sweet variety that is increasing in popularity. The pendant fruits are similar in shape and color to bright red tomatoes. The flesh is thick and mild. Pkt. 15c., ½oz. 45c., oz. 75c., ¼lb. $2.75.

Neapolitan. A sweet Pepper noted for its earliness and extraordinary yielding properties.

Ruby King. The handsome fruits are 4½ to 6 inches long, 4 inches thick, and bright red. Ruby King is used very largely for pickles, and it is equally suited for slicing. The flavor of the fruits is mild and pleasant, with just a slight suspicion of piquancy, making them very tempting when served like cucumbers or tomatoes. (See illustration below.) **Pkt. 15 cts., ½oz. 45 cts., oz. 75 cts., ¼lb. $2.75.**

Large Bell, or **Bull Nose.** A large, early variety of pleasant flavor, though mild. This is the variety for green stuffed Peppers. Ripens into a bright red. Pkt. 10 cts., ½oz. 40 cts., oz. 70 cts., ¼lb. $2.50.

Sweet Mountain. Fruits 6 inches long by 4 inches thick, shining deep green when young and a handsome red when ripe. Flavor mild. **Pkt. 10 cts., ½oz. 40 cts., oz. 70 cts., ¼lb. $2.50.**

A WONDERFUL LONG SWEET PEPPER

Anaheim Chili. A long type that is classed as a sweet Pepper; it has just sufficient suggestion of pungency to make it delicious. The fruits are very meaty, measuring 7 inches or more in length, with a diameter of 1 inch. It is highly valued as a green chili, canned chili made from it is a revelation, while ripe and red, served as a salad, it is excellent. Pkt. 15 cts., ½oz. 55 cts., oz. 90 cts., ¼lb. $3.

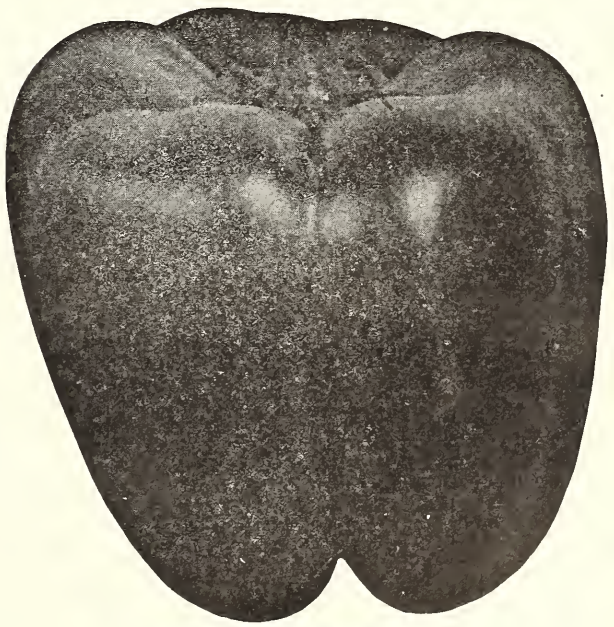
TWO LONG HOT PEPPERS

Long Red Cayenne. Fruits about 4 inches long and 1 inch thick, bright red in color; very prolific; very hot. Used for pickling, both when green and when ripe. Pkt. 15 cts., ½oz. 45 cts., oz. 75 cts., ¼lb. $2.75.

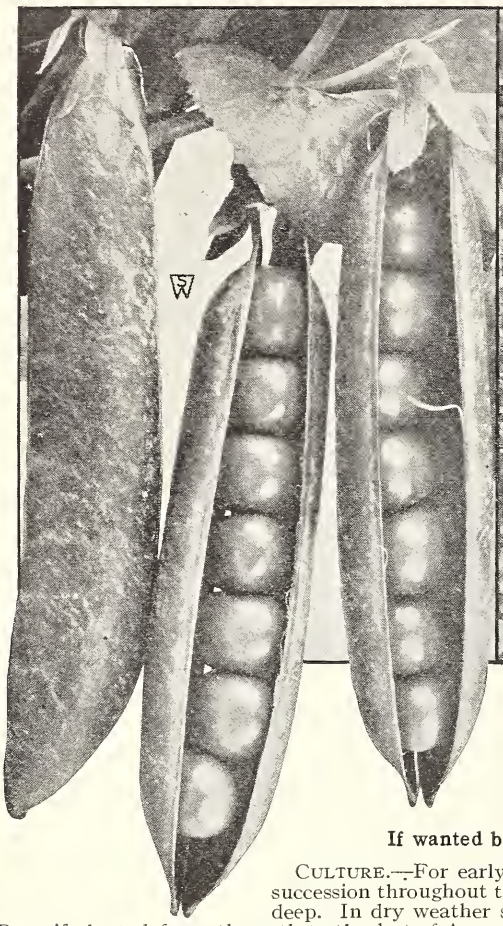
Red Cluster. Bears a profusion of red clusters of very thin, pungent Peppers in an upright position. Pkt. 15 cts., ½oz. 45 cts., oz. 75 cts., ¼lb. $2.75.

A SMALL HOT PEPPER

Cherry Red. Small, round fruit, rich scarlet in color, and extremely piquant. Pkt. 15 cts., ½oz. 45 cts., oz. 75 cts., ¼lb. $2.75.



S. & W. Co.'s Selected Ruby King Pepper



Laxtonian Peas. A wonderful medium dwarf variety that is unusually prolific. Full description on opposite page.

One pound will plant 100 feet of drill

PEAS NORTHERN GROWN

If wanted by mail, add 5 cts. per ½lb., 10 cts. per lb., 15 cts. per 2 lbs. to the prices listed

CULTURE.—For early crops sow as early in spring as practicable, and again every two or three weeks for a succession throughout the season up to the 1st of August. Plant in single or double rows, 4 feet apart and 2 inches deep. In dry weather soak the Peas over night before planting. In the vicinity of New York the extra-early Peas, if planted from the 15th to the last of August, will produce a medium crop for late picking when they will be found most acceptable. Varieties marked * are wrinkled Marrows, and should be sown more thickly than the round Peas, and not until the ground has become warm, as they are more liable to rot. All wrinkled sorts are much superior in flavor to the round Peas.

EARLY SMOOTH-SEEDED SORTS

First of All, or Pedigree Extra-Early. A smooth-seeded variety and a splendid cropper; Peas very tender, of good flavor, and carried in long, well-filled pods. Height 2½ feet. **½lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $2.10, 15 lbs. $6.20.**

Alaska. A round, slightly pitted, blue-seeded sort, grown largely by canners. An extremely early variety. Height 24 inches. ½lb. 20 cts., lb. 35 cts., 2 lbs. 65 cts., 5 lbs. $1.60, 15 lbs. $4.70.

Early Bird. A Pea which combines the hardiness of the round-seeded types with the quality of the later wrinkled Marrowfats. The plant grows 4 to 4½ feet high, and therefore requires the support of brush, wire, or strings. Throughout its height it bears profusely 4-inch pods closely packed with Peas of fine flavor. Early Bird is a few days earlier than Gradus when sown at the same time, but you may safely plant it ten days ahead of Gradus. **Pkt. 10 cts., ½lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $2.10, 15 lbs. $6.20.**

Eight Weeks. } See Novelties, page 5. Pkt. 15 cts., ½lb. 35 cts.,
Market Surprise. } lb. 60c., 2 lbs. $1.15, 5 lbs. $2.85, 15 lbs. $8.45.

EARLIEST WRINKLED SORTS

***World's Record.** Among early main-crop Peas of medium height, Gradus, or Prosperity, takes first place; happily named, indeed, on account of its high yield and superb flavor. In World's Record these points are more than maintained; the yield is as high and the quality, if anything, is enhanced. The great point in favor of the new sort is its *earliness*, the period from seed to maturity being less by a week than that of the standard Gradus. **Pkt. 15 cts., ½lb. 35 cts., lb. 60 cts., 2 lbs. $1.15, 5 lbs. $2.85, 15 lbs. $8.45.**

***Gradus, or Prosperity.** Undoubtedly one of the most valuable sorts introduced up to the present time. The vine has heavy stems, with large, light green leaves and grows about 3 feet high. It produces uniformly large pods, measuring from 4 to 4½ inches in length, nearly round and well filled with very large, handsome Peas of the finest flavor; very early, ready for picking after First of All is through, and leaves little to be desired. Height 3 feet. **Pkt. 10 cts., ½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**

***Little Marvel.** A first-early Pea of the finest quality, better than American Wonder or Nott's Excelsior. The vines of dwarf, even growth, average 18 inches high, and are heavily set with fine pods, usually in pairs. The pods average 3½ inches in length, are square at the bottom, and are well filled with quite large, deep green Peas. The Peas are ready for picking fully as early as American Wonder, but the pods are larger and the vines bear a much heavier crop. All who desire a fine crop of an early, choice variety of Peas will be delighted with Little Marvel. Begins to bear just as Gradus is at its best. **Pkt. 10 cts., ½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**

***Thomas Laxton.** A remarkably fine, early, wrinkled Pea, and we think destined to supersede Gradus. In many characteristics it resembles that excellent sort, but the pods differ in shape, and are certainly more numerous. The Peas are of extra-fine quality, tender and of a flavor not excelled by any other. It grows about 3 feet in height, but does not need brushing. Ready for picking at the same time as Sutton's Excelsior. It is a remarkably profitable market Pea, as it is always in demand and brings the best prices. Height 3 feet. **½lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $2.10, 15 lbs. $6.20.**

***Sutton's Excelsior.** A variety that calls for highest commendation; equal to Gradus in quality and considerably more productive. Ready for picking just after Gradus and Little Marvel. Height 18 inches. **½lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $2.10, 15 lbs. $6.20.**

NOTE.—The American Seed Trade generally has adopted the cental system of pricing Peas, Beans, and Corn. We therefore offer by weight instead of measure. One pound of Peas is equal to about 1 pint; 2 pounds to about 1 quart.

PEAS NORTHERN GROWN

If wanted by mail, add 5c. per ½lb., 10c. per lb, 15c. per 2 lbs., to the prices listed

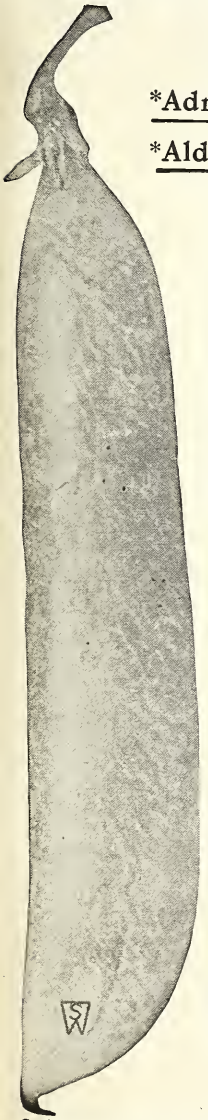
EARLIEST WRINKLED SORTS, Continued

***Laxtonian.** A very fine dwarf early Pea. Unusually large pods, borne on long-growing, sturdy vines. Unlike many of its class, the large pods are filled with large, luscious Peas. It is ready for use about a week later than the very early sorts. The plant grows about 1½ feet high, and is of a rich dark green color, which proves it to be of vigorous constitution, and this enables it to resist the extreme conditions to which Peas are subjected in many sections of the United States. (See photograph on opposite page.) **Pkt. 10 cts., ½lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**

***Early Morn.** This grand introduction maintains its position as one of the best early marrowfat Peas ever raised. Although so early, the seed should not be sown until the soil is in a fit condition to receive it in April, as it is a rapid grower. The pods are very large and well filled, and are often ready to pick several days after Gradus. Height about 4 feet. **½lb. 30 cts., lb. 50 cts., 2 lbs. 95 cts., 5 lbs. $2.35, 15 lbs. $6.95.**

***American Wonder.** A very early wrinkled Pea that will bear about the same time as Little Marvel, but is not so large or prolific. Height 1 foot. 1 kt. 10 cts., ½lb. 20 cts., lb. 35 cts., 2 lbs. 65 cts., 5 lbs. $1.60, 15 lbs. $4.75.

Buttercup. A splendid Pea of English origin. Remarkable for its heavy yield of large pods filled with Peas of the most delicious flavor. Height 2 feet. Pkt. 10 cts., ½lb. 20 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.

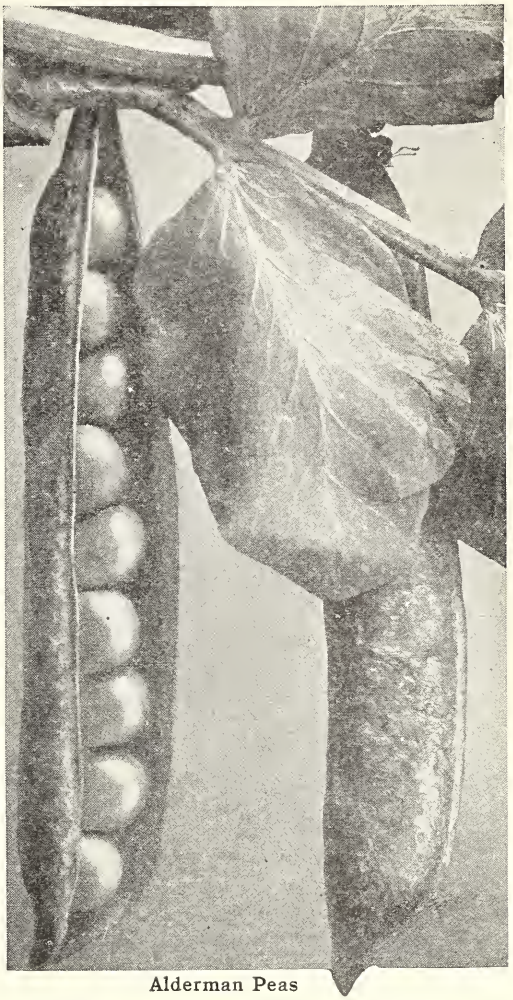


Quite Content. One of the largest-podded Peas in cultivation.

MIDSEASON AND MAIN-CROP

***Admiral Beatty.** See Novelties, page 5. **Pkt. 25c., ½lb. 40c., lb. 75c., 2 lbs. $1.40, 5 lbs. $3.25, 15 lbs. $9.50.**

***Alderman.** A distinctly different Pea in habit from those described in the Early list. On generous soils it grows to a height of 5 to 6 feet, and should be supported with brush or trellises. The pods contain seven large, elongated, dark green Peas of the highest quality, and follow in the wake of Thomas Laxton. The plants bear very profusely and the Peas bring the highest price in market. Height 5 feet. **Pkt. 10 cts., ½lb. 20 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**



Alderman Peas

***Quite Content.** One of the largest-podded Peas in existence and in season similar to Alderman. This variety is preferred by many growers to Alderman on account of its large pods. Height 5 feet. **½lb. 35 cts., lb. 60 cts., 2 lbs. $1.15, 5 lbs. $2.85, 15 lbs. $8.45.**

***Boston Unrivaled, or Telephone.** This variety is much like Alderman, with vines fully as tall, pods slightly smaller, and bears right up to the season of the very late sorts. The yield of pods is not so great and they are not so well filled as Alderman. The Peas are every bit as tender, but darker green in color and sweet. Height 5 feet. **Pkt. 10 cts., ½lb. 20 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**

***Potlach.** Really an improved Stratagem and, without a doubt, the best dwarf, extremely late Pea. Healthy bluish green vines, bearing loads of deep green pods; frequently an average of eight pods in pairs containing an average of seven fine, large Peas of superfine flavor. A continuous bearer from July 1 to 15 in most seasons. Height 2 feet. **Pkt. 10 cts., ½lb. 20 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $1.85, 15 lbs. $5.45.**

***Champion of England.** Vines grow 4 to 5 feet high. Peas of excellent quality and delicious flavor. ½lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $2.10, 15 lbs. $6.20.

EDIBLE-PODDED SUGAR PEAS

Used in the same manner as wax beans

Luscious Melting Sugar. Large, broad pods, which are so brittle that they snap without any string. Height 5 feet. ½lb. 30 cts., lb. 55 cts., 2 lbs. $1.05, 5 lbs. $2.60, 15 lbs. $7.70.

Very Dwarf White Sugar. Unusually dwarf; very similar in habit to the American Wonder. The pods are of excellent melting quality. ½lb. 30 cts., lb. 55 cts., 2 lbs. $1.05, 5 lbs. $2.60, 15 lbs. $7.70.

Collections of Garden Peas

These collections embody our ideas of the best and most representative varieties. They are considered by experienced growers to be the most reliable sorts for both the amateur and professional gardener. We suggest that two sowings be made of each variety—the first as soon as the ground is ready and the weather is right, and the second two weeks later. The result will be a maximum yield, and the grower should be able to gather Peas daily over a period of five weeks.

The Following Five Varieties Comprise the Collections

Market Surprise. A wonderful, round-seeded variety, yielding in about 70 days from seed. Height 3 feet.
***Gradus.** The standard early wrinkled Pea, yielding generally in 80 days. Height 3 feet.
***Little Marvel.** A wrinkled sort, 1½ feet high. Requires about 85 days from seeding to maturity.
***Telephone.** The standard late tall wrinkled Pea. Produces its pods in about 90 days from seed. It grows 5 feet high
***Potlach.** An extremely late wrinkled variety, yielding in 95 days from seeding. Height 2 feet.

THE COLLECTIONS

	Postpaid		Postpaid
One packet each of above five Peas	$0 50	One pound each of above five Peas	$2 00
Half-pound each of above five Peas	1 25	Two pounds each of above five Peas	4 00
		Five pounds each of above five Peas	10 00

Please do not ask us to make changes in these Collections. The fact that they are prepared in advance of our "rush" season enables us to offer them at a lower price than that of the separate varieties purchased in the usual way.

POTATOES FOR SEED

CULTURE.—Any good, well-drained, fibrous loam will produce Potatoes under right climatic conditions. For early Potatoes, which mature in eight to ten weeks from planting, the soil must be particularly rich. A rich clover sod, manured and broken the year before and planted to corn, beans, peas, oats, etc., is in best shape for giving a good yield of nice, clean Potatoes. Stable manure had better be applied to the land the year before. S. & W. Co.'s Potato Manure, at the rate of up to 1,000 pounds to the acre if applied broadcast, or 400 to 600 pounds if applied mostly in the rows, may be used directly for the Potato crop. Open furrows 3 feet apart and 3 to 4 inches deep. Apply the fertilizer and run the furrower or small plow again in the furrow to mix the fertilizer with the soil and leave a mellow seed-bed. Then plant good-sized pieces, each containing not less than two or three eyes, 15 inches apart in the furrows for early Potatoes, and 18 inches apart for late ones. Return the soil with a coverer, small plow or other suitable tool. Spray with Pyrox as a protection from flea beetle, potato beetle and blight. About 11 bushels, or 4 barrels, will plant an acre.

Prices subject to change without notice.

Early Bovee Potatoes

BEST EARLY POTATOES

Early White Albino. This wonderful new early Potato is a good cropper. The skin and flesh are extremely white, of exceptionally good cooking quality and very prolific, fully as early as the old Early Rose in maturing, and particularly valuable for the early market by reason of its fine shape and early maturity. The vines grow erect, and it is one of the best early varieties to withstand blight and disease. Plant this Potato early in good soil, give it good cultivation, and pleasing results will be sure at harvest-time. One grand thing in favor of this early Potato is its great keeping quality which makes it a valuable sort for the home- or market-garden. **½pk. $1.25, pk. $2, ½bus. $3.25, bus. $5.50, bbl. $12.**

Irish Cobbler. A variety that is more largely used as an early variety than any other. The flesh is white and of fine quality. **½pk. 75 cts., pk. $1.25, ½bus. $2, bus. $3.50, bbl. $8.**

Early Bovee. (Selected.) Somewhat earlier than Early Rose. A medium-sized Potato; very productive. The dwarf growth of vines permits easy cultivation, insuring a good yield. ½pk. 85 cts., pk. $1.50, ½bus. $2.50, bus. $4.50, bbl. $10.

Early Rose. (Selected.) A variety which has been grown extensively in some sections. A Potato of good size and fine quality. ½pk. 75 cts., pk. $1.25, ½bus. $2, bus. $3.50, bbl. $8.

BEST MAIN-CROP POTATOES

Russet. Considered the finest Potato extant. The haulm is dark green and very distinct, while the variety seems to be as near blight-proof as a Potato can be. The tubers are round to oblong, very large, and from 6 to 10 are ordinarily obtained from a hill; the flesh is pure white and the skin has a roughened russet appearance. **½pk. $1, pk. $1.75, ½bus. $3, bus. $5, bbl. $11.**

Gold Coin. A splendid main-crop variety of remarkable productiveness and finest table quality; slightly oblong form; light golden skin; flesh pure white, fine-grained; cooks very dry. ½pk. $1, pk. $1.75, ½bus. $3, bus. $5, bbl. $11.

Green Mountain. (Selected Stock.) A late, heavy cropper of excellent quality; skin smooth and white; shape roundish flat; eyes few and shallow; a good keeper. ½pk. 75 cts., pk. $1.25, ½bus. $2, bus. $3.50, bbl. $8.

Large Cheese Pumpkin

PUMPKINS

One ounce will plant 50 hills

CULTURE.—Plant in April or May, among corn, or in the garden, in hills 8 to 10 feet apart, and otherwise treat in the same manner as melons.

Large Cheese. A most popular variety. Fruit flattened, the diameter being two or three times more than the length; skin mottled light green and yellow, changing to rich cream-color as it matures; flesh tender and of excellent quality. **Pkt. 10c., oz. 20c., ¼lb. 55c., lb. $1.75.**

Sweet, or **Sugar** (New England Pie). The fruits are medium to small in size, of a bright orange color, and in shape are round, flattened at the ends. The flesh is of remarkably good cooking quality, very thick, and deep yellow in color. Pkt. 10 cts., oz. 20 cts., ¼lb. 55 cts., lb. $1.75.

Winter Luxury. This we recommend as one of the best pie Pumpkins; an excellent keeper and enormously productive. It is very finely netted and in color it is a golden russet. Pkt. 10 cts., oz. 25 cts., ¼lb. 75 cts., lb. $2.50.

Mammoth Tours. This Pumpkin is of interest on account of its enormous size. The skin is pale grey-green in color, marbled deeper green, smooth and slightly ribbed. The flesh is yellow and of fair cooking quality. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.75.

King of the Mammoths. Recommended where size is the chief consideration—200 pounds or more being not an unusual weight for a single specimen. The fruit is flat-round; the skin is yellow, as also is the thick flesh. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.75.

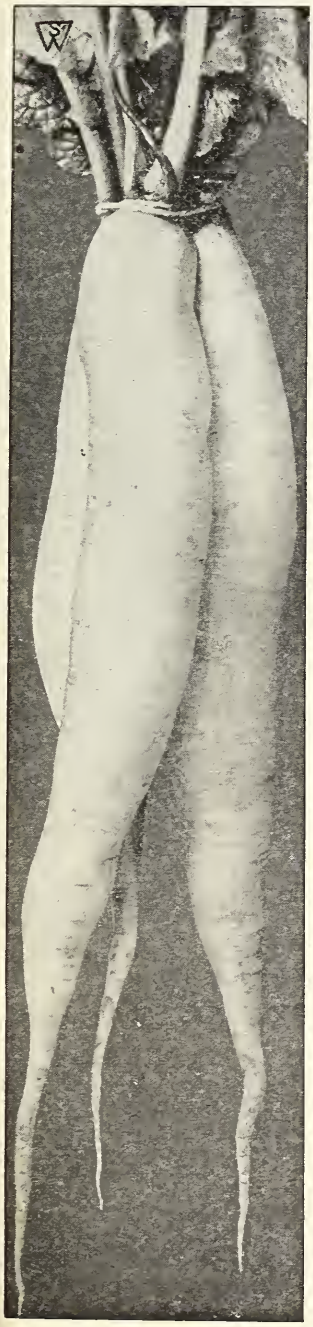
Connecticut Field. Grown for stock purposes. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. $1.25.

RADISH

One ounce will sow about 100 feet of drill

As early in the spring as the soil can be worked, sow any of the early round or olive-shaped varieties in rows, ½ inch deep, with a foot to 18 inches between the rows. Sow thinly. If seedlings appear closer than one inch apart, they should be "thinned out." Hoe frequently to encourage rapid growth which insures high quality. The early spring sorts serve the purpose until June 15, when Icicle and Cincinnati Market are at their best. The summer sorts are good until frost from repeated planting. The winter varieties should be pulled after light frosts and stored like beets. Both summer and winter Radishes should be "thinned" to stand from 4 to 6 inches apart in the row. After the middle of May, do not sow the flat, round, and olive-shaped spring sorts. Sow White Icicle, Cincinnati Market, and Chartier. These resist hot weather well. About July 1, sow the winter varieties.

EARLY ROUND AND OLIVE-SHAPED VARIETIES



White Icicle Radishes

Early Scarlet Turnip. Within 25 days from date of sowing it perfects handsome, flat roots, ¾ inch in diameter by ½ inch deep through. **Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. $1.25.**

Sparkler. Of rich carmine-scarlet color, with a very pronounced tip of the purest white. The roots, even when fully developed, are solid, crisp and sweet, and remain fit for use as long as the coarser kinds. It is equally well adapted for forcing in frames or growing in the open ground. While the leaves are small, they are sufficiently large for bunching. **Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts., lb. $2.**

Early Scarlet Globe. The best general-purpose variety in this class, perfecting handsome roots, as illustrated alongside, in from 28 to 35 days after sowing. Of distinct shape, brilliant color, short-leaved, crisp and white; an excellent variety for forcing. **Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. $1.50.**

White Box. An almost globe-shaped sort, slightly flattened, with pure white skin and crisp flesh. Unlike most other early sorts, it remains in fine table condition until quite overgrown. Ready in from 35 to 40 days. **Pkt. 10 cts., oz. 20 cts., ¼lb. 55 cts., lb. $1.75.**

Olive-shaped Scarlet. Flesh bright and crisp. Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts., lb. $2.

Olive-shaped White. Pkt. 10c., oz. 25c., ¼lb. 80c., lb. $2.50.

French Breakfast. The olive-shaped counterpart of Cooper's Sparkler among the early round sorts, as described above. A favorite sort; mild and crisp. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. $1.50.

BEST EARLY LONG SORTS

White Icicle. The "best all-round" Radish for all purposes in the home-garden; also fine for market and splendid for growing under glass. Within 30 days from sowing seeds, the roots attain a length of 4 to 5 inches, by ¾ inch in diameter at the thickest part. The skin is thin, the flesh crisp and mild. It remains in fine table condition longer than any other early sort, regardless of shape. (See illustration.) **Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts., lb. $2.**

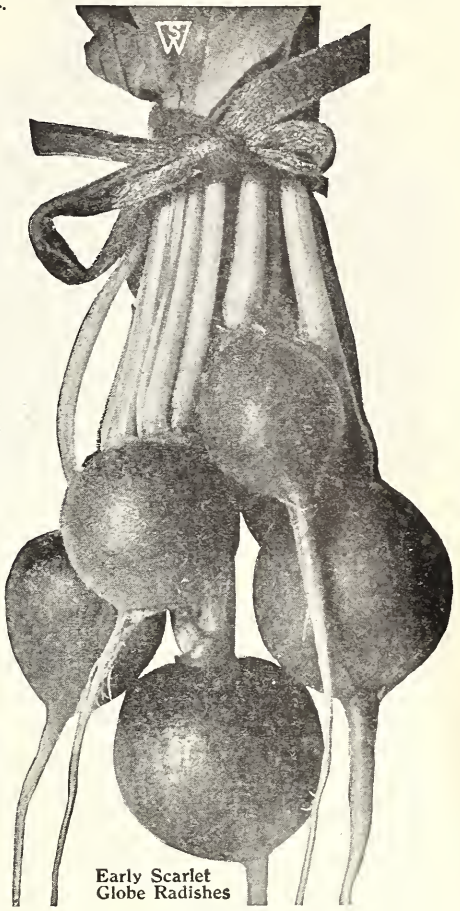
Cincinnati Market. By far the best strain of the long, scarlet, short-top Radishes. Roots 6 to 7 inches long, an inch thick through, are produced within 35 days after sowing and they remain in perfect condition for the best part of a week. Skin rosy scarlet, blending into pure white at the tip. It is well to remember that the long sorts require a deep, rich soil, free from stones and of a loose, sandy nature, in order to develop perfectly. **Pkt. 10 cts., oz. 20 cts., ¼lb. 55 cts., lb. $1.75.**

SUMMER VARIETIES

Long Scarlet Chartier, or **Shepherd.** This might be considered "the connecting link" between the foregoing sorts and the very much later kinds that follow. Long Scarlet Chartier is ready in about 45 days after sowing. The color at the top is crimson, running into pink about the middle, and from thence downward is a pure white. Pkt. 10 cts., oz. 20 cts.. ¼lb. 55 cts., lb. $1.75.

Early Golden Yellow Oval. Absolutely unsurpassed in heat-resistance. When ready for use, the Radishes average 1½ to 2 inches in diameter and have a beautiful, golden yellow skin, which should be removed when preparing roots for table. Flesh pure white, mild, crisp, and solid. Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.

White Strasburg. Shape tapering; skin and flesh both white; excellent summer variety Pkt. 10c., oz. 20c., ¼lb. 60c., lb. $2.



Early Scarlet Globe Radishes

LONG-KEEPING WINTER RADISHES

Sakurajima. A Japanese sort which reaches truly remarkable size. The circumference of some is 43 inches, the length 21 inches. The skin is white and the flesh is always crisp and tender. The taste is more delicate than our American varieties, and we believe that this variety will become popular. Pkt. 10c., oz. 30 cts.. ¼lb. $1, lb. $3.50.

California Mammoth White Winter. A white-fleshed Radish of excellent quality. Pkt. 10 cts., oz. 30 cts., ¼lb. $1, lb. $3.50.

Rose China. Bright rose color; flesh firm and piquant; fine for winter use. Pkt. 10 cts., oz. 20 cts.. ¼lb. 60 cts., lb. $2.

Long Black Spanish. The popular winter sort. Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts., lb. $2.

Round Black Spanish. Thick black skin and pure white flesh. Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts., lb. $2.

RHUBARB

CULTURE.—Plant the roots in well-manured land, 3 feet apart. Sow seed in spring in drills a foot apart; transplant the following season 3 feet apart. One ounce of seed should produce about 1,000 roots.

Rhubarb Roots. 15 cts. each, $1.50 per doz.; extra-strong clumps, 25 cts. each, $2.50 per doz.; forcing clumps, 50 cts. each, $5 per doz.

Rhubarb Seed. The variety **Victoria;** has given good results for many years. Pkt. 10 cts., oz. 30 cts., ¼lb. $1, lb. $3.

New York Market Spinach (Long Island Grown)

SALSIFY (Vegetable Oyster)

One ounce will sow about 50 feet of drill

CULTURE.—Sow the seed early in spring, in drills 12 inches apart and 1 inch deep, thinning out the young plants to 6 inches. The roots will be ready in October, when a supply should be taken up and stored like carrots. Those remaining will suffer no injury by being left in the ground until spring.

Mammoth Sandwich Island. Tender and delicious. Superior to all other sorts. Pkt. 10 cts., oz. 25 cts., ¼lb. 75 cts., lb. **$2.75.**

SCORZONERA

(Black Salsify)

One ounce will sow about 50 feet of drill

CULTURE.—Cultivate the same as salsify. The roots should not be scraped, but simply washed, boiled tender, then peeled and served like asparagus.

Improved. Pkt. 10 cts., oz. 40 cts., ¼lb. $1.40, lb. $5.

Mammoth Sandwich Island Salsify

SPINACH

One ounce will sow about 100 feet of drill

CULTURE.—Sow in March or April in drills an inch deep and 14 inches apart; again in August or September. Spinach delights in very rich soil—in fact, it is of no use sowing in a poor one.

S. & W. Co.'s New York Market. **(Long Island grown.)** This Spinach grows rapidly and produces unusually large, thick, crumpled leaves of beautiful green. Properly cultivated and manured, the plants very often measure 2 feet across, and stand the winter better than any other sort of Spinach. **Pkt. 10 cts., oz. 15 cts., ¼lb. 50 cts., lb. $1.50.**

S. & W. Co.'s Savoy-leaved. A variety highly valued alike by market-growers and home-gardeners. The leaves are wrinkled and crumpled, resembling, to an extent, the Savoy cabbage. The variety is profitable on account of the heavy yield of produce, and it is particularly hardy. **Pkt. 10 cts., oz. 15 cts., ¼lb. 25 cts., lb. 75 cts.**

S. & W. Co.'s Large Thick-leaved. A splendid variety for the market-grower and trucker. The leaf is large and very thick. The fact that Thick-leaved is a type that is slow to run to seed makes it a favorite for late spring and early fall seedlings. **Pkt. 10 cts., oz. 15 cts., ¼lb. 20 cts., lb. 60 cts.**

Long Season. A distinct variety, standing from two to three weeks longer than any of the other sorts in this climate without going to seed. Pkt. 10 cts., oz. 15 cts., ¼lb. 30 cts., lb. 85 cts.

Monstrous Viroflay. A fine selection of the old lettuce-leaved Spinach. Excellent for summer use. Pkt. 10 cts., oz. 15 cts., ¼lb. 20 cts., lb. 60 cts.

Large Thick-leaved Spinach. A variety that is slow to "bolt" to seed

Victoria Long-Standing. A variety suitable alike for spring and fall seeding. It is of low, compact habit; leaves shining dark green and heavily crumpled, forming a dense, flat rosette with very short petioles. Victoria is a great favorite with the market-grower on account of the slowness with which it shoots to seed. Pkt. 10 cts., oz. 15 cts., ¼lb. 20 cts., lb. 60 cts.

Prickly, or Winter. The hardiest Spinach, and a variety of actual merit. Used chiefly for latest fall seedings, when, with the protection of hay or straw, it will carry over the winter through into the spring more readily than other types. Pkt. 10 c., oz. 15c., ¼lb. 30c., lb. $1.

S. & W. Co.'s Emerald Standing. See Novelties, page 5. Pkt. 15 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

NEW ZEALAND SPINACH

(*Tetragonia expansa*)

A half-hardy annual cultivated for its young leaves which form an excellent substitute for Spinach. The plants grow very vigorously, do not run to seed, and withstand drought much better than Spinach. New Zealand Spinach should therefore find a place in every garden, to furnish a summer supply of green boiled vegetables. It is recommended for use, also, on soils too poor to carry Spinach of the true type, as it grows naturally on dry upland situations.

CULTURE.—Sow during May, in drills which should be at least 2 feet apart, as the plants spread rapidly. Thin to 9 inches between the plants in the row. Keep the surrounding soil well stirred and pinch off the young leaves and shoots freely as required, when others will be produced quickly in their place right through the summer. One seeding will suffice for a whole season, as the plants produce continuously until frost.

Imported Seed of high vitality and best quality. Pkt. 10 cts., oz. 15 cts., ¼lb. 50 cts., lb. **$1.50.**

Green Lyon. The smooth-leaved type with short, thick, white "Chards" or stems.

SWISS CHARD

Spinach Beet

One ounce will sow about 100 feet of drill

The plants are cultivated for the leaves which are used for "greens," the same as spinach or beet-tops; they are equal in quality and easier to prepare than spinach, and far superior to beets. Sow as early in spring as the ground can be worked, in rows 12 inches apart, and thin out to 5 inches apart in the rows. As it grows, thin out for use. It can be used all summer when spinach is not available.

Mammoth New York. This is a new and quite distinct sort, medium green in color, and of large size. The leaves are smooth, and the stalks are solid, thick, and of a pearly whiteness. Careful breeding has entirely eliminated the earthy flavor which many Chards possess. We anticipate a large demand for this variety. **Pkt. 15 cts., ½oz. 35 cts., oz. 65 cts., ¼lb. $2.50.**

Giant Lucullus. Plants of this variety grow to a height of 2 to 2½ feet. The stalks are quite thick, 1½ inches broad, heavily ribbed and from 10 to 12 inches long below the leaf. The extra-large leaves are sharply pointed at the top, while in texture they are heavily crumpled. The leafy portion of the foliage is cooked and served in the same manner as spinach. The leaves and stalks, served as separate vegetables, afford two distinct dishes from the same plant at one time. **Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts., lb. $1.75.**

Green Lyon. A vigorous-growing, stocky type with smooth, deep green leaves and broad, thick stalks. A very popular variety. **Pkt. 10 cts., oz. 20 cts., ¼lb. 45 cts., lb. $1.25.**

Giant Lucullus. A tall Swiss Chard with deeply wrinkled and crumpled leaves

SEA KALE

One ounce will produce about 300 plants

Sow an inch deep in drills 2 feet apart, thin out to 6 inches, and the next spring plant in hills 3 feet apart. Sea Kale is cultivated somewhat like asparagus and, like it, the crop is not available until the third year from seed, after which the bed will bear for a number of years. The blanched leaf-stalks are boiled and served with cream sauce. A very usual method of cultivation is to dig the roots and "force" them during winter in the same way as Witloof is grown. **Pkt. 15 cts., oz. 50 cts., ¼lb. $1.85, lb. $6.50.**

SORREL

One ounce will sow about 100 feet of drill

CULTURE.—Sow early in the spring in drills 6 to 8 inches apart.

Garden. Used for salads, and much esteemed on account of its pleasant acid flavor. Also widely used in many sections of the country as a boiled vegetable. The plant is perennial, and will yield for several years if left undisturbed. Pkt. 10 cts., oz. 35 cts., ¼lb. $1.25, lb. $4.

TOBACCO

One ounce of seed will produce sufficient plants for one acre

Sow under glass during February and plant out, 3 feet apart each way, during early June.

Connecticut Seed-Leaf. A variety which can be used for cigar wrappers and for general purposes. Pkt. 10 cts., oz. 75 cts.

Narrow-Leaf Oronoko. This is widely used in Virginia for cigar fillers and as a cigarette tobacco. Pkt. 10 cts., oz. 75 cts.

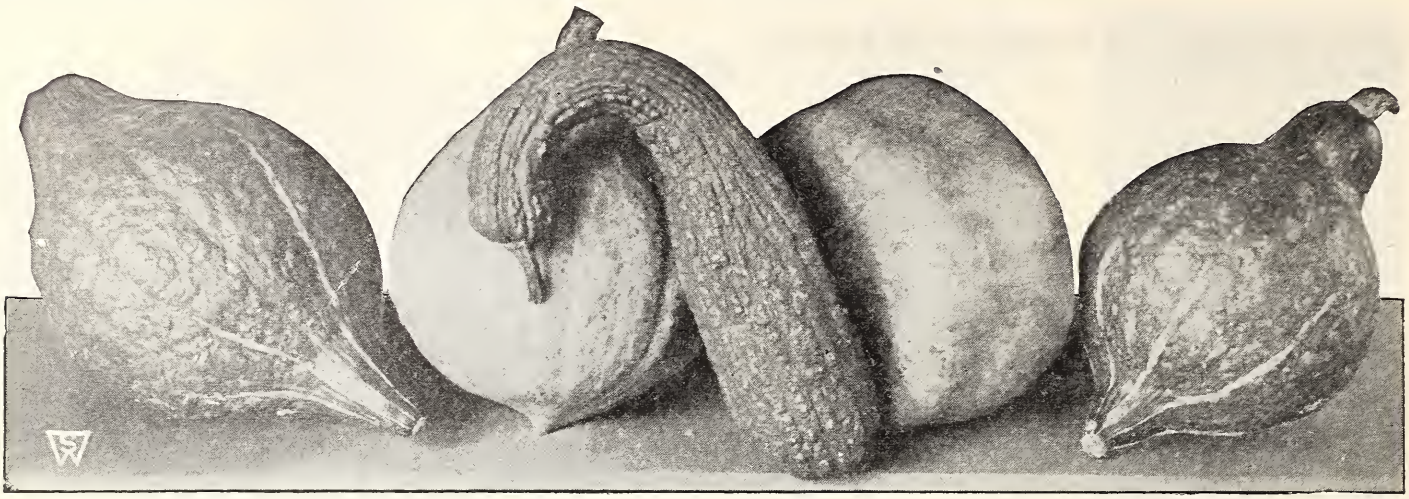
Quesnel. Very extensively grown in the Province of Quebec, Canada, and used for pipe smoking; strong, pungent flavor. Pkt. 10 cts., oz. $1.

AN EFFICIENT GARDEN CULTIVATOR AT A POPULAR PRICE

The "Standard" Cultivator

is the most efficient high-wheel cultivator made. By means of a patented frame, adjustment is made instantly with one wing nut. Attachments are forged from tool steel, hardened and polished. They will scour and work perfectly in any soil. **Price, complete with three attachments, $4.50.**

THIS MACHINE IS GUARANTEED



Hubbard Boston Marrow Crookneck Delicious

SQUASH

One ounce of Early Squash will plant about 25 hills
One ounce of Marrow Squash will plant about 50 hills

CULTURE.—The Squash succeeds best in good rich soil. It is not advisable to plant before May 15. Sow in hills in the same manner as cucumbers and melons.

SUMMER VARIETIES

Long Island White Bush. A selection of the Old White Bush Scalloped, and a vast improvement upon it, having less prominent ridges and being much deeper, so that a single Squash actually contains nearly twice as much weight for the same cubic measurement as the old sort. In addition to this, it is of finer quality and very prolific. We can strongly recommend this variety. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Giant Bush Summer Crookneck. The Crookneck class of Squash surpasses in quality any of the summer varieties, and in the Giant Bush we have the delicious buttery flavor of the original sort, but of just double the size. See illustration above. **Pkt. 10c., oz. 25c., ¼lb. 80 cts., lb. $2.50.**

Delicata. Early and very prolific; of oblong shape. Ground color orange-yellow, splashed and striped with very dark green. Although of small size, the Squashes are solid and heavy, while the quality is rich and dry. An excellent "all seasons" Squash. Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.

Golden Custard. Mammoth strain of the Early Yellow Scalloped Bush. Golden yellow flesh, quality excellent. Pkt. 5 cts., oz. 20 cts., ¼lb. 55 cts., lb. $1.75.

FALL OR WINTER VARIETIES

Chicago, or Warted Hubbard. A selection of the largest and best rough-skinned specimens of Green Hubbard. Ideal for the home market. Vines of strong, robust growth; fruits large, heavily warted, splendid shape and dark green; flesh rich and dry. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Golden Hubbard. For the private garden. The fruits are of the same shape as the Green Hubbard, except that they average one-half to one-third less in size. Flesh deep gold, much richer in color than Hubbard. Cooks dry and of rich flavor. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

Hubbard. Bluish green color, occasionally marked with brownish orange. Will keep from September to May. **Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.**

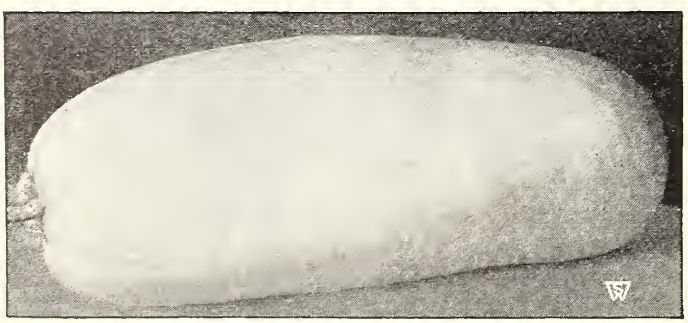
Boston Marrow. A very popular Squash for fall or winter use. Bright orange color, flesh yellow; oval in form. A splendid keeper and excellent for pies. Pkt. 5 cts., oz. 15 cts., ¼lb. 50 cts., lb. $1.50.

Delicious. No Squash approaches it in its remarkable combination of fineness and compactness of grain, dryness, sweetness, and exceeding richness of flavor. It grows to weigh from 5 to 10 pounds, and is in its prime in mid-autumn and early winter. Pkt. 10 cts., oz. 25 cts., ¼lb. 80 cts., lb. $2.50.

ENGLISH VEGETABLE MARROW

A type of Squash that always occupies an important place in European gardens, and one which is considered superior in many respects to our American varieties of Summer Squash. Cultivation is similar, although to obtain quickest and largest yields it is often grown on spent hotbeds or in a few inches of soil placed on a manure-pile. The Marrows are gathered before they ripen—usually in about a similar stage of maturity to that of Cucumbers when gathered for slicing. They are peeled, divided, and the seeds are removed; then cut into 3-inch squares, boiled until tender and served as a melting and delicious side dish with cream sauce.

Long Green Trailing. The fruits are about 20 inches in length and 3 or 4 inches in diameter. The skin is dark green, marbled with a paler shade. **Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.**



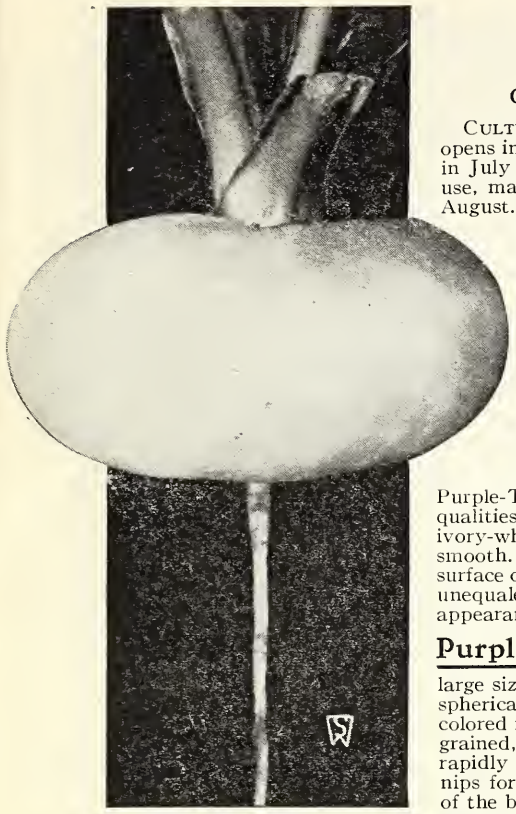
Long White Trailing Vegetable Marrow

Long White Trailing. The fruit is a little shorter than the Long Green Trailing, but otherwise it is similar in shape. The skin is smooth and of a yellowish white. The flesh is remarkably tender. **Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.**

Moore's Cream. An improved small-fruited variety; the fruits are oval in shape, cream-colored and of a very delicate flavor Pkt. 10 cts., oz. 30 cts., ¼lb. $1, lb. $3.50.

Italian Vegetable Marrow (Cocozelle Squash). A non-trailing type producing oblong fruits a foot in length and about 5 inches in diameter; handsomely mottled dark green and light. A great favorite. **Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.**

Mixed Vegetable Marrow. Trailing and non-trailing, all varieties in combination. Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. $3.



Early White Milan Turnip. One of the earliest varieties in cultivation

TURNIP

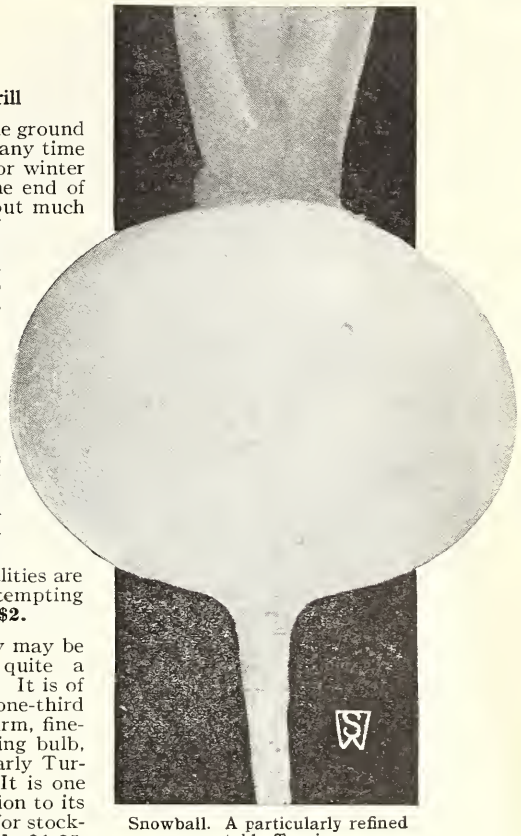
One ounce will sow about 150 feet of drill

CULTURE.—For early Turnips, sow as soon as the ground opens in spring. Rutabagas should be sown from any time in July to first of August; but the other kinds, for winter use, may be sown from the middle of July to the end of August. Turnips are generally sown broadcast, but much larger crops are obtained (particularly of the Rutabagas) by cultivating in drills 18 inches apart, and thinning to 6 inches in the drill. Sow in drills, one pound to the acre; broadcast, two to three pounds to the acre.

FINE WHITE-FLESHED TYPES

Early White Milan. As early as the Early Purple-Top Milan and possessing all of its good qualities. The entire "bulb," inside and out, is clear ivory-white in color; the outer surface is perfectly smooth. It grows so quickly that even the outer surface of the "bulb" is quite tender. Its table qualities are unequaled, being of the most delicate flavor and tempting appearance. **Pkt. 10c., oz. 20c., ¼lb. 60c., lb. $2.**

Purple-Top White Globe. This variety may be grown to quite a large size, without developing signs of coarseness. It is of spherical shape, the skin white with the upper one-third colored reddish purple. The flesh is pure white, firm, fine-grained, and of superior flavor. A handsome looking bulb, rapidly taking the lead of all other varieties of early Turnips for market and home-gardening purposes. It is one of the best sorts to store for winter, and, in addition to its fine table qualities, it is excellent and economical for stock-feeding. **Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. $1.25.**



Snowball. A particularly refined table Turnip

Snowball. An excellent first-early, globe-shaped root; smooth, clean, and free from all coarseness. A variety that is recommended particularly to the home-gardener on account of its splendid table qualities. **Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. $1.50.**

Red-Top Strap-Leaf. A very popular type, maturing in about two months from sowing. The roots are flat, marked with reddish purple on the upper portion; the flesh is pure white and of fine quality. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. $1.50.

Early Purple-Top Milan. An excellent smooth-skinned flat Turnip; the upper portion is tinted purple, but the flesh is pure white, delicate, and sweet. Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts., lb. $2.

White Egg. A variety that is oval in shape, and is, in consequence, somewhat more economical than the globe or flat types. It is sweet, very mild, and of fine crisp texture. Color pure white. Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts., lb. $2.

Long White, or **Cow Horn.** A quick-growing, long-shaped variety; flesh fine-grained and sweet, excellent for table use. Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts., lb. $2.

White French, or **Sweet German.** A delicate-flavored variety; an excellent keeper and fine for table use. Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts., lb. $2.

YELLOW-FLESHED TYPES

Golden Ball, or Orange Jelly. This is the most distinct yellow Turnip we know. The flesh is of a very fine texture, making it one of the best table varieties. Its beautiful color and fine flesh have earned for it the synonym of "Orange Jelly," which well describes its appearance when ready for the table. The bulb is of medium size, with small tap-root, and is early in maturing. **Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts., lb. $2.**

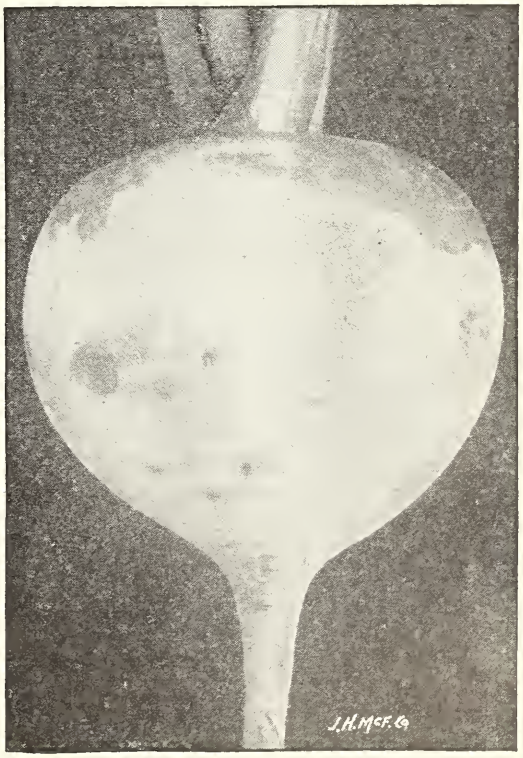
Yellow Aberdeen. A very hardy and productive variety of fine form and excellent quality. It has a purple top, keeps remarkably well, and is excellent both for the table and for stock. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. $1.25.

AN ALL-LEAF TURNIP

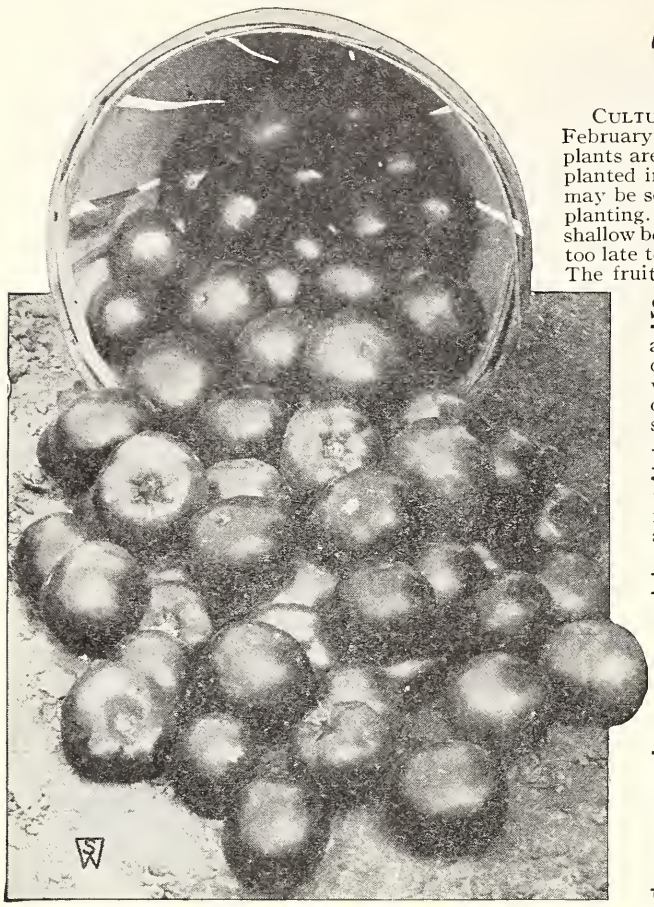
Seven Top. In this variety there is but little development of root. The leaves, however, are very numerous and large, and the vegetable is recommended to those who esteem "Turnip-tops," as a particularly healthful and palatable green cooked vegetable, many considering it superior to spinach. **Pkt. 10 cts., oz. 15 cts., ¼lb. 50 cts., lb. $1.50.**

RUTABAGA (Russian or Swedish Turnip)

S. & W. Co.'s Long Island Improved. This special strain of Rutabaga is grown on Long Island by a very careful grower. It is of a remarkably uniform shape and fine quality, and is also a splendid keeper. It grows to a large size, the skin is smooth, and flesh is beautiful yellow and fine-grained. **Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. $1.25.**



Purple-Top White Globe Turnip



Chalk's Early Jewel Tomato

TOMATO

One ounce will produce about 1,000 plants

CULTURE.—The seed may be sown in a hotbed from about the second week in February up to the end of April, in drills 5 inches apart and ½inch deep. When the plants are about 2 inches high they should be transplanted about 4 inches apart, or planted in 4-inch pots, allowing a single plant to a pot. About May 15, the plants may be set out in the open ground, 3 feet apart. Water freely at the time of transplanting. Sufficient plants for a small garden may be started by sowing a few seeds in a shallow box or flower-pot and placing it in a sunny window. For a final seeding it is not too late to sow seed during June, using early varieties and sowing in the open ground. The fruit is greatly improved in quality if the vines are tied to a trellis or to stakes.

Stone. By far one of the best and most reliable of the main-crop red Tomatoes and the standard and general favorite with truckers and canners. The plant is very vigorous and the deep red fruits are produced freely; they are uniform, large, round, smooth, mealy, and possess very little core. The flavor is fine and non-acid. Stone is superior to any other main-crop Tomato for its heavy yield and high quality. We offer a specially selected stock. **Pkt. 10 cts., oz. 35 cts., ¼lb. $1.30, lb. $4.50.**

Earliana. **The Earliest Red Tomato.** The plants are of compact growth, with short, close-jointed branches, setting the fruit very freely in the center. The Tomato is of uniform size, averaging 3 inches in diameter, and from 2 to 2½ inches in depth; solid, with few seeds, making a splendid variety for shipping. **Pkt. 10 cts., ½oz. 25 cts., oz. 45 cts., ¼lb. $1.50, lb. $5.50.**

Ponderosa. Enormous size is the chief characteristic of this variety. Few Tomatoes equal it in this respect, and while slightly ribbed, it is very solid and luscious, making it fine for the family garden. The fruit is deep purple, oblong in form, ridged or ribbed, and with small seed-cells. They frequently weigh one pound or more each. The flavor is good, and we recommend Ponderosa for the home-garden. **Pkt. 10 cts., ½oz. 40 cts., oz. 75 cts., ¼lb. $2.75, lb. $10.**

Crimson Cushion. The largest of the bright red Tomatoes, in fact, a red Ponderosa. Crimson Cushion is more symmetrical in shape than Ponderosa and is much thicker through from stem to blossom end; in fact, so marked is this characteristic that it is frequently almost round. The color is brilliant scarlet-crimson, untinged with purple, and the fruit ripens up almost to the stem. The flesh is firm and "meaty," and of superb quality. **Pkt. 10 cts., ½oz. 30 cts., oz. 55c., ¼lb. $1.80, lb. $6.50.**

Bonny Best. Considered among the best of the early sorts. The fruits are bright red in color, of medium size, and are produced in large quantities. **Pkt. 10c., ½oz. 25c., oz. 40c., ¼lb. $1.40, lb. $5.**

CHALK'S EARLY JEWEL. About a week later than Earliana. It is of uniformly large size; of brightest red, deep fruited and solid. Bears splendid, large-sized Tomatoes throughout the season, and for quantity and quality of fruit it is easily without a rival among the best extra-earlies. Pkt. 10 cts., ½oz. 25 cts., oz. 40 cts., ¼lb. $1.40, lb. $5.

MATCHLESS. The color is rich cardinal-red. The skin is so tough that it is a splendid keeper and shipper, and is less liable to crack in wet weather than any other large Tomato. Unsurpassed for market or for table. The plant is a strong grower, and is very productive, bearing with undiminished vigor until frost. The fruit is free from core, and the seed-spaces are comparatively small. In flavor among the best. Pkt. 10 cts., ½oz. 30 cts., oz. 50c., ¼lb. $1.75, lb. $6.50.

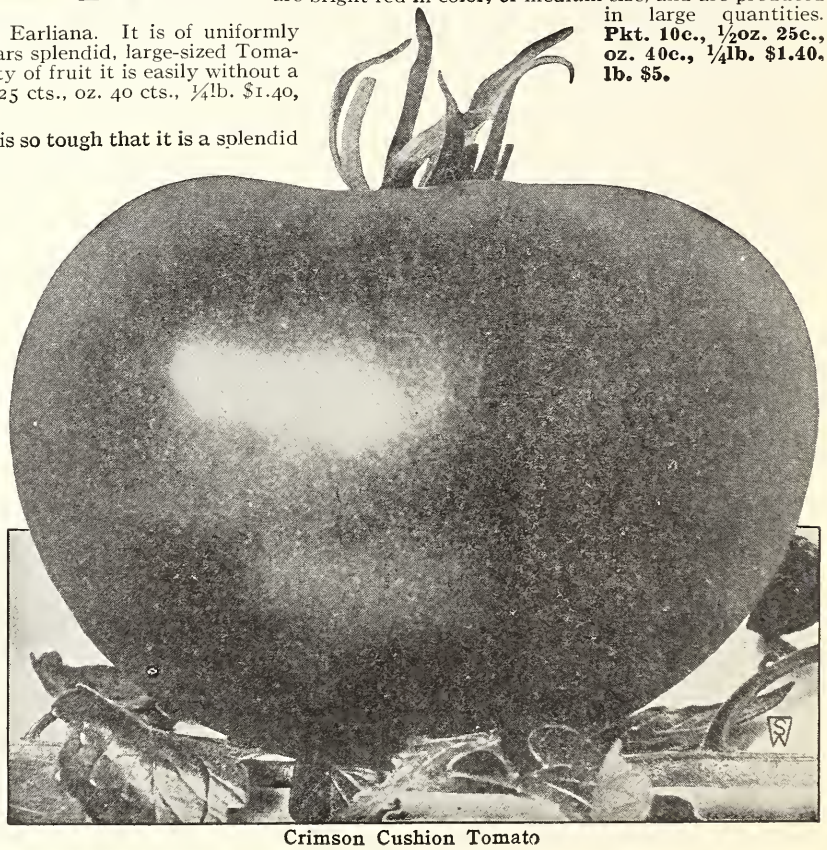
S. & W. CO.'S EXHIBITION STRAIN OF NEW GLOBE. By far the best type of Globe Tomato and the most satisfactory shipping variety. See Novelties, page 5. Pkt. 15 cts., ½oz. 45 cts., oz. 85 cts., ¼lb. $2.75, lb. $10.

TWO DWARF, COMPACT TOMATOES

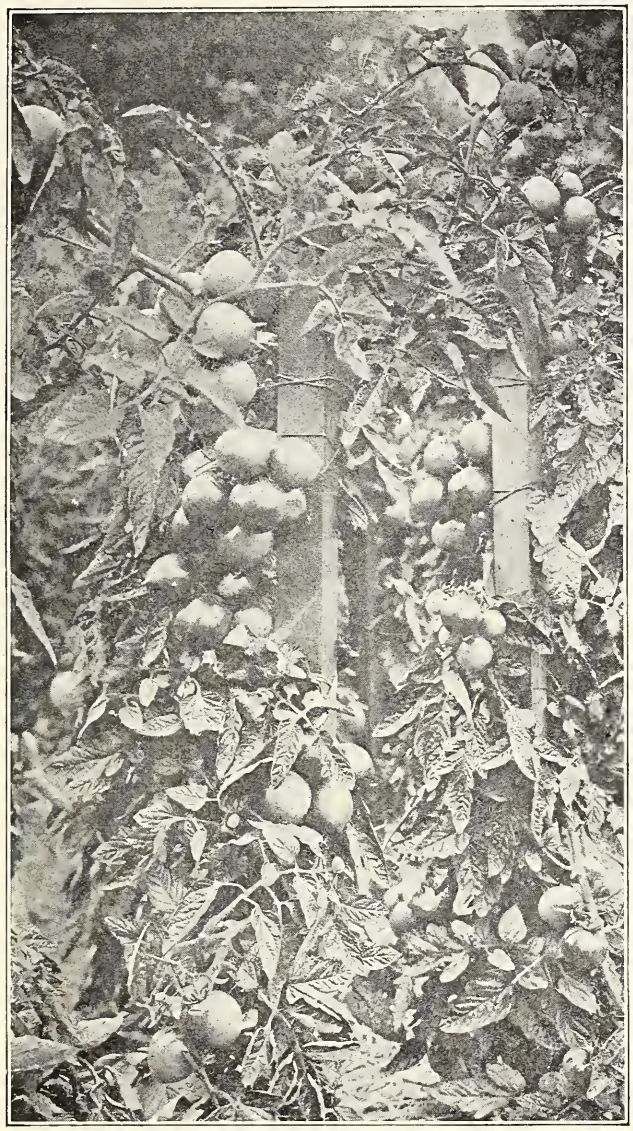
They need little or no support

DWARF CHAMPION. Distinct in foliage and habit of growth, being compact and upright; fruits medium size and resemble the Acme in appearance, the color being a purplish pink; smooth and symmetrical. Pkt. 10 cts., ½oz. 25 cts., oz. 45 cts., ¼lb. $1.50, lb. $5.50.

DWARF STONE. The fruits are produced in clusters of three to five, and, as the growth is close-jointed, each plant produces a large number. The Tomatoes average 4 inches in diameter and 2½ inches in depth. Its dwarf, compact habit suggests its use to all amateurs. Pkt. 10 cts., ½oz. 25 cts., oz. 45 cts., ¼lb. $1.50, lb. $5.50.



Crimson Cushion Tomato



John Baer Tomato. The plants have been trained to a single stem

A Remarkable New Tomato

John Baer. An early, bright red Tomato of wonderful quality. But little later than Earliana, it far surpasses that variety in size and quality; it is, further, one of the heaviest-yielding sorts we know. The flesh is solid, possessing a fine flavor, free from acid. The fruits contain remarkably few seeds, and in this connection it is interesting to note that for seed purposes we find it requires over seven bushels of hand-selected, perfect fruits to produce one pound of seed. This fact was somewhat of a surprise to us when harvesting our 1920 crop, and our supplies of this variety are *short*. The limited quantity which we have to offer is of a private stock and has been grown under our personal supervision. **Pkt. 15 cts., ½oz. 65 cts., oz. $1.25, ¼lb. $4.50, lb. $15.**

The Best Yellow Tomato

Golden Ponderosa. The best large golden yellow Tomato. Smooth in appearance, of excellent quality, enormous size and ripens early. In shape very much like the Scarlet Ponderosa, but of a bright yellow color. Golden Ponderosa, served sliced and accompanied by a high-class scarlet variety, similarly sliced, presents an appetizing combination difficult to resist. **Pkt. 10 cts., ½oz. 40 cts., oz. 75 cts., ¼lb. $2.50, lb. $8.50.**

Small-Fruiting Tomatoes

The fruits of these are largely used for making fancy pickles, preserves, etc., while their size, shape, color, and flavor make them desirable additions to salads. The plants are extremely productive.

King Humbert. In shape and size, King Humbert is suggestive of a hen's egg. The fruits are bright scarlet in color and are frequently produced in enormous clusters. Pkt. 15 cts., ½oz. 45 cts., oz. 75 cts., ¼lb. $2.75.

Yellow Cherry
Red Cherry
Red Currant
Peach
Red Pear-shaped
Yellow Pear
Red Plum
Yellow Plum

Above eight varieties: Pkt. 10 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. $1.75

Strawberry or **Husk Tomato.** The plants are of dwarf, spready growth and very productive. The fruit is yellow, about the size of a good-sized strawberry and is enclosed in a husk. Pkt. 10 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. $1.75.

COLLECTION of Small-fruited Tomatoes: One packet each of the above 10 varieties, $1

Forcing Tomatoes

Varieties recommended for cultivation under glass, yielding during winter and spring.

S. & W. Co.'s Best of All. A variety of matchless form and color. Fruits beautiful, smooth, round and wonderfully prolific. Color of rich scarlet-red; setting very freely in bunches. Equally good for outdoor culture as for forcing. **Pkt. 15 cts., ¼oz. 40 cts., oz. $1.25.**

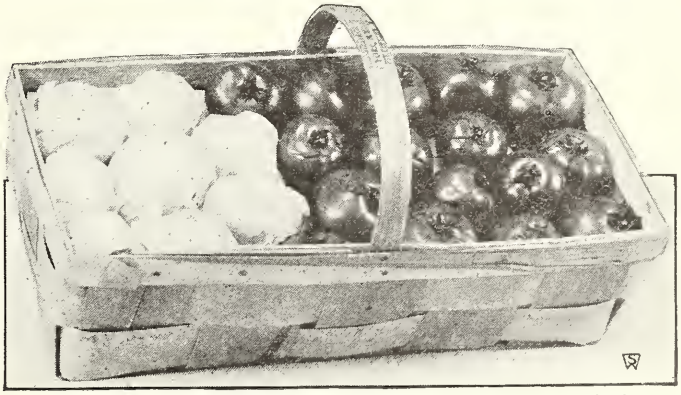
Comet. Grown very largely by both private and market-gardeners. It is very short-jointed, fruiting close up to the stem. The Tomatoes are of medium size; deep scarlet. See illustration below. **Pkt. 15 cts., ¼oz. 30 cts., oz. $1.**

Stirling Castle. A very superior variety for either forcing or outdoor culture. Very heavy cropper, of medium size, smooth and round. Color a clear red. Remarkable for its free setting qualities and delicious flavor. **Pkt. 15 cts., ¼oz. 30 cts., oz. $1.**

Sunrise. A fruit of fine quality, medium in size, perfectly round, and produced in characteristic long clusters. It is considered by many growers to be the best indoor Tomato grown, and the best outdoor variety where a small "whole-salad" type of fruit finds favor. Sunrise has won many awards and prizes. **Pkt. 15 cts., ¼oz. 30 cts., oz. $1.**

Ideal Forcing. A splendid new Tomato for greenhouse growing, of uniform medium size and pleasing globe shape. The flavor is all that can be desired, while the flesh is thick and firm. The seed cavity is small and the seeds are few. The color is a brilliant scarlet. Pkt. 25 cts.

Stamford Beauty. A new indoor Tomato, giving a remarkably heavy yield of large-sized fruit, solid, of rich red color and high quality. Pkt. 25 cts.

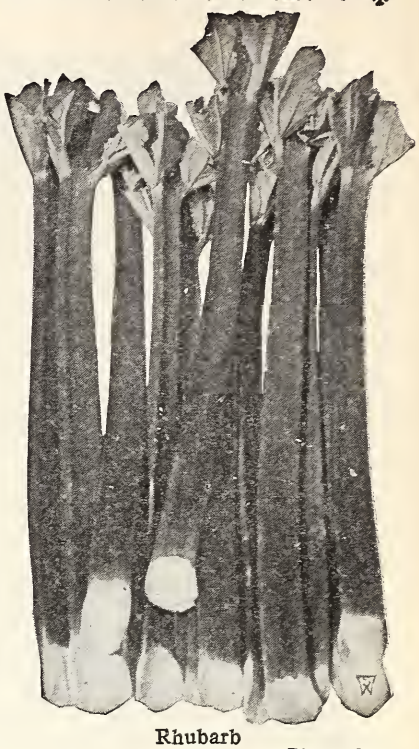


Greenhouse-grown Tomatoes as shipped during the winter months into the New York market

Uniform containers holding 10 pounds are used, and the individual fruits are wrapped in tissue paper. A suitable Tomato weighs 4 ounces, and in shape a deep globe; the color bright scarlet. Comet is a variety largely used for growing under glass.

Vegetable Roots and Plants

Artichoke Roots, Jerusalem. Used for feeding stock and pickling. Tubers resemble potatoes. Qt. 35 cts., pk. $2.
Asparagus Roots. For full description, culture and prices, see page 6.
Chives. Used for flavoring. We supply large, growing clumps, 25 cts. each, $2.50 per doz.
Horse-Radish Roots. Will produce good Horse-Radish, fit for use in one season's growth. Plant the root so that the top will be 2 inches under the ground. 25 cts. per doz., $1.50 per 100.
Mint Plants. Selected pot-plants. Used for Mint sauce and juleps. 25 cts. each, $2.50 per doz.
Rhubarb Roots. The roots we offer are of the Giant Crimson Victoria variety. They may be planted in any good garden soil in the early spring. Divided roots, 15 cts. each, $1.50 per doz., $10 per 100; extra-strong clumps, 25 cts. each, $2.50 per doz., $20 per 100.
Sweet Potato Plants. Red or Yellow variety. Ready in June. 75 cts. per 100, $5 per 1,000.
Tarragon Plants. Used for seasoning. Strong pot-plants, 35 cts. each, $3.50 per doz.
Cauliflower Plants. **Cabbage Plants.** **Eggplant Plants.**
Pepper Plants. **Lettuce Plants.** **Tomato Plants.**
Furnished during April, May and June. Prices and varieties on application.



Rhubarb

Vegetable Roots for Winter Forcing

Send for circular giving descriptions and cultural treatment

Asparagus. Extra-large clumps of Barr's Mammoth and Conover's Colossal. $1.50 per doz., $10 per 100, $90 per 1,000.
Rhubarb Roots. Extra-large clumps of Giant Crimson Victoria. Excellent for forcing in the cellar or greenhouse during the winter months. 50 cts. each, $5 per doz., $35 per 100.
Witloof Chicory Roots. Extra-selected roots for forcing. 10 cts. each, 75 cts. per doz., $5 per 100, $40 per 1,000.

Aromatic, Medicinal and Pot Herbs

	Pkt.	Oz.
Anise (*Pimpinella Anisum*). Seeds aromatic and carminative	$0 10	$0 30
Arnica (*Arnica montana*). Valuable medicinal qualities	20	
Balm (*Melissa officinalis*). For culinary purposes	15	
Basil (*Ocymum basilicum*). Sweet. Culinary herb used for flavoring soups, etc.	$0 10	$0 25
Bene (*Sesamum orientale*). The leaves used for dysentery	15	40
Borage (*Borago officinalis*). Leaves used as a salad....¼lb. $1.50, lb. $5...	15	40
Burnet (*Poterium Sanguisorba*). Used in the manufacture of cooling drinks..	10	25
Caraway (*Carum Carvi*). Used in flavoring liquids and bread...¼lb. 65c...	10	20
Catnip (*Nepeta cataria*). Has medicinal qualities	15	40
Chamomile (*Anthemis nobilis*). Has both tonic and febrifugal properties.	15	
Chives (*Allium Schœnoprasum*). Used as a substitute for onions in soups and salads. (Clumps offered above.)	20	1 00
Coriander (*Coriandrum sativum*). Seeds aromatic.....¼lb. 35c., lb. $1..		15
Cumin (*Cuminum Cyminum*). Known also as Fennel Flower. Seeds are used as an ingredient in curry powder, pickles, soups, and pastry	10	25
Dill (*Antheum graveolens*). Seed used for flavoring vinegar.....¼lb. 65c...	10	20
Fennel (*Sicilian*). True variety; rounded thickened leaf-bases..¼lb. 80c...	10	25
Horehound (*Marrubium vulgare*). Has medicinal qualities	15	40
Hyssop (*Hyssopus officinalis*). Has medicinal qualities	15	40
Lavender (*Lavandula vera*). True. For oil and distilled water	20	75
Marjoram (*Origanum Majorana*). Sweet. Used in seasoning	15	50
Rosemary (*Rosmarinus officinalis*). Yields an aromatic oil and water	15	50
Rue (*Ruta graveolens*). Said to have medicinal qualities	15	50
Saffron (*Carthamus tinctorius*). Used for medicine and also in dyeing	15	40
Sage (*Salvia officinalis*). Common. A culinary herb; also used in medicine..	15	50
Savory (*Satureia hortensis*). Summer. Used as a culinary herb	15	40
Savory (*Satureia montana*). Winter. Employed in the kitchen for seasoning.	20	50
Thyme (*Thymus vulgaris*). English Broad-leaved Winter. Employed for seasoning; the oil is sometimes used in perfumery	15	50
Thyme (*Thymus vulgaris*). French. A small-leaved, less hardy type than the above. Used for the same purposes	15	50
Woodruff (*Asperula odorata*)	20	
Wormwood (*Artemisia absinthium*). Has medicinal qualities	15	40

Sicilian Fennel or Finocchio

Mint | Lavender | Summer Savory | Rosemary | Thyme | Sage | Chamomile | Arnica | Dill | Sweet Marjoram

First prize collection of vegetables exhibited at the Silver Jubilee Flower Show of the Morris County Gardeners' and Florists' Society, Morristown, N. J., 1921. Exhibited by the Estate of H. McK. Twombly, Superintendent R. E. Tyson. Stumpp & Walter Co.'s Seed used

EXHIBITION VEGETABLES

The successful grower realizes that gilt-edge seeds of the highest quality are necessary for **First Prize Results.** For the expert who wishes to grow the **Best Twelve vegetables** we offer our **Exhibitor's Collection;** in each case the quantity of seed is small, but the variety is absolutely the best it is possible to obtain.

S. & W. Co.'s Collection of Twelve Exhibition Vegetables, $2.25

1 pkt. Beans, Masterpiece. Sow 10 weeks prior to the show
1 pkt. Beet, Winter Keeper. Sow 18 weeks prior to the show
1 pkt. Brussels Sprouts, Favorite. Sow 20 weeks prior to the show
1 pkt. Savoy Cabbage. Sow 20 weeks prior to the show
1 pkt. Carrot, Melting Marrow. Sow 18 weeks prior to the show
1 pkt. Cauliflower, Snowball. Sow 18 weeks prior to the show
1 pkt. Celery, Golden Plume. Sow 22 weeks prior to the show
1 pkt. Leek, Exhibition. Sow 28 weeks prior to the show
1 pkt. Onion, Ailsa Craig. Sow 25 weeks prior to the show
1 pkt. Parsley, Exhibition Curled. Sow 15 weeks prior to the show
1 pkt. Parsnip, Exhibition. Sow 28 weeks prior to the show
1 pkt. Tomato, Exhibition Strain of New Globe. Sow 22 weeks prior to show

TOTAL VALUE OF THE ABOVE, IF SELECTED SEPARATELY FROM OUR CATALOGUE, AMOUNTS TO $2.55. Mailed anywhere in the United States or Canada, $2.25 including postage

COLLECTIONS OF VEGETABLE SEEDS

That Ensure a Season's Supply from the Garden, $1, $2, $5 POSTAGE INCLUDED

THESE COLLECTIONS include the most popular standard varieties, all of the same reliable quality as the goods listed elsewhere in our Catalogue. The fact that we are able to prepare them in advance of our rush selling season, thus reducing handling charges, enables us to *save you money.* Further, you may be one of our customers to whom the selection of varieties from our Catalogue is burdensome; in which case, the fact that our collections *save you time* will commend them to you.

S. & W. Co.'s Garden Full of Vegetables for One Dollar. Eighteen packets of the best seeds obtainable. List of contents on application.

S. & W. Co.'s Suburban Garden Collection. This contains twenty-five packets, each enclosing a generous quantity of the highest quality seeds, as follows:

Bush Beans, 4 vars.	Carrot	Cucumber	Muskmelon	Peas, 2 varieties	Tomato
Beet	Celery	Kohlrabi	Onion	Radish, 2 varieties	Spinach
Cabbage, 2 varieties	Corn	Lettuce, 2 varieties	Parsley	Swiss Chard	Turnip

MAILED ANYWHERE IN THE UNITED STATES OR CANADA, $2, INCLUDING POSTAGE

The Suburban Garden Collection will plant a garden up to about 40 by 50 feet in size. The above varieties, if selected separately from Catalogue, cost $2.55.

S. & W. Co.'s Country Garden Collection. This comprises thirty-five packets, ounces, and half-pounds of the highest quality seeds, as follows. Their total value, if selected separately from our Catalogue, amounts to $5.40. The Country Garden Collection will plant a garden up to 50 by 100 feet in size. 4 half-pounds Beans, 3 half-pounds Peas, 9 ounces and 19 packets of vegetable seeds, 35 varieties in all.

MAILED ANYWHERE IN THE UNITED STATES OR CANADA, $5, INCLUDING POSTAGE

Collections of Vegetable Seeds for Children's Gardens

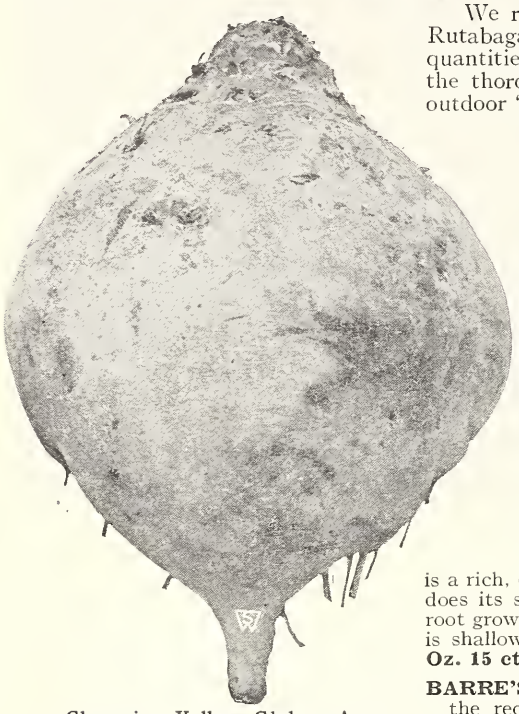
FOR DISTRIBUTION BY SCHOOL AUTHORITIES, PERSONAL GIFT, ETC.

As supplied to the Education Department, New York City

These Collections comprise one small packet each of **Bush Beans, Beet, Carrot, Kohlrabi, Lettuce, Radish, and Swiss Chard.** Seeds are of the highest quality and strongest vitality.

DOZEN COLLECTIONS, $2.50. HUNDRED COLLECTIONS, $19. THOUSAND COLLECTIONS, $180.

ROOT CROPS FOR STOCK-FEEDING



Champion Yellow Globe. A refined type, of convenient shape and high nutritive value.

We recommend strongly to the cattle breeder and dairy farmer, Mangels, Carrots and Rutabagas. A palatable, easily stored, easily digested, and nutritious food is yielded in large quantities per acre. They stimulate the flow of milk of high grade; their cultivation ensures the thorough cleaning of the land; and they may be stored into the winter in root-cellars or outdoor 'pits' with but little trouble.

MANGEL-WURZEL

CULTURE.—Sow in drills during May or June, about 2 feet apart; thin out to 9 to 12 inches in the rows. The long varieties are best suited to a deep soil, and the globe sorts succeed better than the long sorts on sandy soil. 6 to 8 pounds are required for one acre.

Mammoth Long Red. This is the giant among Mangels. The roots are of enormous size, very regular and clean, with but small top-growth. The skin is bright, rich red, and the roots, which frequently exceed 2 feet in length, grow from one-half to two-thirds above the ground. The maximum tonnage per acre is produced by this variety. **Oz. 10 cts., ¼lb. 25 cts., lb. 75 cts., 10 lbs. $7.**

Red Eckendorff. This variety is suited to soils of medium depth. It is of high feeding value, and its tonnage yield per acre is enormous when cultivated with average care. Its peculiar shape enables the grower to lift the crop with little difficulty. **Oz. 15 cts., ¼lb. 35 cts., lb. $1, 10 lbs. $9.**

Champion Yellow Globe. Occupies the same position among Mangels as the Jersey cow does among cattle. The skin is a rich, deep yellow; the flesh is fine, white, and solid. Not only does its shape lend itself to easy lifting, but two-thirds of the root grows above ground, hence it is a good variety where the soil is shallow. Its feeding value is high and it is a good keeper. **Oz. 15 cts., ¼lb. 30 cts., lb. 90 cts., 10 lbs. $8.**

BARRE'S SLUDSTRUP. Has been recommended as holding the record for dry-matter content. This Mangel has been awarded a First-Class Certificate several times by the Danish government, the highest honor in Denmark, where Mangels are as important as corn is here. Sludstrup is a long, reddish yellow, ovoid root, growing more than half above the ground. Easily harvested and is considered to excel most varieties in both weight and feeding value. Oz. 15 cts., ¼lb. 35 cts., lb. $1, 10 lbs. $9.

GOLDEN TANKARD. Smooth, yellow flesh; small, yellow-stemmed top; length 15 inches, diameter 5 inches, shape cylindrical. Usually grows half out of the ground. Easily pulled, good yielder; very hardy and nutritious. Oz. 15 cts., ¼lb. 35 cts., lb. $1, 10 lbs. $9.

MAMMOTH LONG GOLDEN. The root is long and cylindrical, tapering gradually at each end. The skin is golden yellow, with a greenish shade above ground; flesh is white, sweet, and firm. A deep soil in which analysis shows the presence of a fair proportion of lime suits this variety. In spite of the large size of the root, its shape and the fact that a large proportion of it grows out of the ground enables it to be lifted without difficulty. Oz. 15 cts., ¼lb. 35 cts., lb. $1, 10 lbs. $9.

HALF-SUGAR ROSE. A variety combining the best qualities of sugar beets and Mangels. They are about the same shape as Long Red, but have white skin at the bottom, rose at top. Easier to harvest than sugar beets. Oz. 10 cts., ¼lb. 25 cts., lb. 75 cts., 10 lbs. $7.

SUGAR BEET

Klein Wanzleben. This variety is cultivated on a larger scale than any other Sugar Beet. Root is conical, straight and even, large at top and rapidly tapering. Contains a heavy percentage of saccharine matter. **Oz. 10 cts., ¼lb. 25 cts., lb. 75 cts., 10 lbs. $7.**

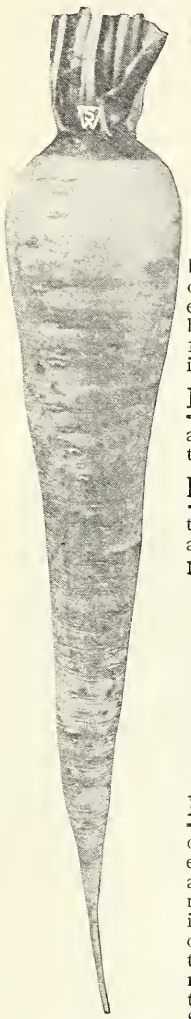
Why You Should Grow Mangels and Sugar Beets

STOCK-FEED. Mangels are high in feeding value and the yield per acre is enormous. Sugar Beets are even more nutritious, but the total weight of crop is not so heavy. Neither will flavor milk, but both will increase its production. Both furnish a succulent food during the winter months.

POULTRY-FEED. Every poultryman should grow either Mangels or Sugar Beets; they supply green food of the highest quality during the winter. The birds will keep themselves in health by pecking at the roots if a few are placed in the runs. Both are nutritious and laxative. If a shallow trench is dug on a well-drained piece of soil, the roots may be readily stored in it over the winter. Place a layer of salt hay over the roots, and over the hay place a layer of soil.

SUGAR-PRODUCTION. The growth of Sugar Beets for the production of sugar is a large and growing industry in the northern and western states. On a small scale the home production of syrup and unrefined sugar was recommended by the Department of Agriculture some few years ago, during the memorable sugar shortage. The process is simple, and our readers may be interested in trying it. Sugar Beets are cut into thin slices and steeped in hot water for an hour and the liquid boiled down to the thickness required, then placed in jars or bottles and sealed. During the boiling, all scum formed is removed. By boiling the syrup further and allowing it to stand, a brown sugar, useful in cooking will settle out.

Mammoth Long Red. The Giant among Mangels



Long Orange Carrot

ROOT CROPS FOR STOCK-FEEDING

Stock Carrots

Carrots are very valuable for all kinds of domestic animals, and are better for horses than any other root-crop. When fed alternately with oats to work-teams on the farm, the value of Carrots has been found to equal the oats they displace. Succulent food, in part, will always prove beneficial. Sow 4 pounds to the acre, from the middle of May to July 1 for main crop. Allow 1 foot apart between rows, and thin out to 7 inches in the rows.

Danvers Half-Long. Deep orange color, half-long, tapering uniformly to a blunt point. Flesh solid, and although of medium length, this strain will give a large yield to the acre. **¼lb. 40 cts., lb. $1.25, 10 lbs. $11.50.**

Long Orange. A very desirable type for field culture where the soil is thoroughly and deeply tilled. A foot or more is the usual length, with a diameter of 3 inches at the top. Its economy is apparent. **¼lb. 50 cts., lb. $1.50, 10 lbs. $14.**

Mammoth White Belgian. We offer the best stock we know of this popular type. The root is about 16 inches long, a quarter of which is above ground. The skin is white below and is greenish where it grows above ground. Its narrow shape enables it to be grown closely together in rows with profit, and its yield is therefore enormous. Excellent as a winter ration for horses and cattle. ¼lb. 40c., lb. $1.25, 10 lbs. $11.50.

Danvers Half-Long Carrot will give a large yield to the acre

RUTABAGA (Russian or Swedish Turnip)

Sow 4 pounds to the acre, in June, in drills 2 feet apart.

Improved American Purple-Top. A particularly fine type of Rutabaga with reddish purple top. It is almost spherical in shape, and in consequence is easily lifted. The yellow flesh shows on analysis a very high percentage of dry matter; in other words, its feeding value is remarkably good. In our opinion our strain of Improved American Purple-Top is the best type of Rutabaga on the market today. We recommend it for stock-feeding rather than for table use. **¼lb. 35 cts., lb. $1, 10 lbs. $9.50.**

S. & W. Co.'s Long Island Improved. This special strain of Rutabaga is grown on Long Island by a very careful grower. It is of a remarkably uniform shape and fine quality, and is also a splendid keeper. it grows to a large size, the skin is smooth, and flesh is beautiful yellow and fine-grained. We recommend it both for table use and for stock. **Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. $1.25, 10 lbs. $11.50.**

Improved American Purple-Top Rutabaga. A particularly fine type

EXPERIMENT WITH FIELD-ROOTS

We do not suggest that Roots be grown *instead of* corn, but we urge that they be grown *in conjunction with* corn; and for those of our customers who have only grown Roots in small quantities we offer an opportunity to try them out on their land. We have prepared:

Acre Collection of Field-Roots

Containing ½ lb. each of our leading varieties, as follows:

Mangel, Mammoth Long Red.
" Red Eckendorff.
" Champion Yellow Globe.
" Mammoth Long Golden.
" Golden Tankard.
" Half Sugar Rose.
Sugar Beet, Klein Wanzleben.
Carrot, Danvers Half-Long.
Carrot, White Belgian.
Rutabaga, Improved American Purple-Top.

Collection, mailed anywhere in the United States or Canada for $4.50

The total, amounting to 5 lbs., is the recommended total allowance of seed per acre. We invite orders for one or more of this Acre Collection.

S.&W. CO.'S SELECTED STRAINS OF FIELD CORN

The various Field Corns offered on this page have had our personal inspection in their production. They are grown especially for us in the West, in territory that is **free of European Corn Borer;** our customers may therefore plant our seed with the fullest confidence. **Prices are subject to change without notice.**

A field of S. & W. Co.'s New Golden Eureka Yellow Dent Corn (Improved Leaming) showing vigorous growth

New Golden Eureka Dent

(IMPROVED LEAMING)

This magnificent Field Corn is a decided improvement on the popular variety, Eureka, being fully ten days earlier. It is a tremendous yielder. We have had reports of yields of over 150 bushels of shelled Corn to the acre. The plants grow from 12 to 15 feet high, a great proportion of them bearing two ears to the stalk, the ears averaging 12 to 15 inches long, with 18 to 22 rows of deep rich yellow grains and small cob. Seventy pounds of ears frequently yield 60 pounds of shelled Corn. While not so quick to mature as a Flint Corn, where 100 days of "Corn weather" are assured, it is the best Corn to grow. A very fine variety for ensilage, and frequently produces 25 tons of good Corn silage per acre. **Qt. 25 cts., postpaid, 40 cts.; pk. $1.35, bus. $4.50, 10-bus. lots, $4.25 per bus.**

Early Smoky Dent

The earliest Dent Corn in cultivation. Many growers claim that it has every variety of Corn surpassed for early maturity, large size of ears and splendid quality; ears are 8 to 10 inches long and have 12 to 16 rows of kernels on the cob. Stalks average, on good ground, 8 feet or more, and it matures generally in about 90 days from date of planting. It is thus a splendid dual-purpose Corn, valuable both for crib and silo purposes. **Qt. 25 cts., postpaid, 40 cts.; pk. $1.35, bus. $4.50, 10-bus. lots, $4.25 per bus.**

Jumbo Silage

A first-class ensilage variety. Grows 12 to 15 feet high, with mammoth stems in proportion, and an enormous growth of leaves. Under favorable conditions it will produce ears a foot or more long, yielding two of them to a plant. Jumbo Silage Corn is recommended for rich, low lands, where it yields heavy fodder. **Qt. 25 cts., postpaid, 40 cts.; pk. $1.50, bus. $5, 10-bus. lots, $4.75 per bus.**

Luce's Favorite

The favorite for Long Island, eastern New York, and northern New Jersey. A Dent Corn which is as early as the Flint varieties, yet one that yields two to three ears per plant. The ears are crowded with 8 to 12 rows of broad dented golden kernels. The plant is a strong grower, and the leaves are broad and long, making it an excellent sort for fodder and the silo. **Qt. 25 cts., postpaid, 40 cts.; pk. $1.35, bus. $4.50, 10-bus. lots, $4.25 per bus.**

Improved Early Horsetooth. Same as Southern Horsetooth, but better selected and earlier. Small stalks; large quantity of foliage. Qt. 20 cts., postpaid, 35 cts.; pk. $1, bus. $3.50, 10-bus. lots, $3.25 per bus.

Evergreen Fodder. A variety of the Sweet Corn especially valuable as green fodder. Sow broadcast, 2 bushels to the acre; in drills 3 feet apart, one bushel per acre. Qt. 25 cts., postpaid, 40 cts.; pk. $1.50, bus. $5, 10-bus. lots, $4.50 per bus.

Longfellow Flint

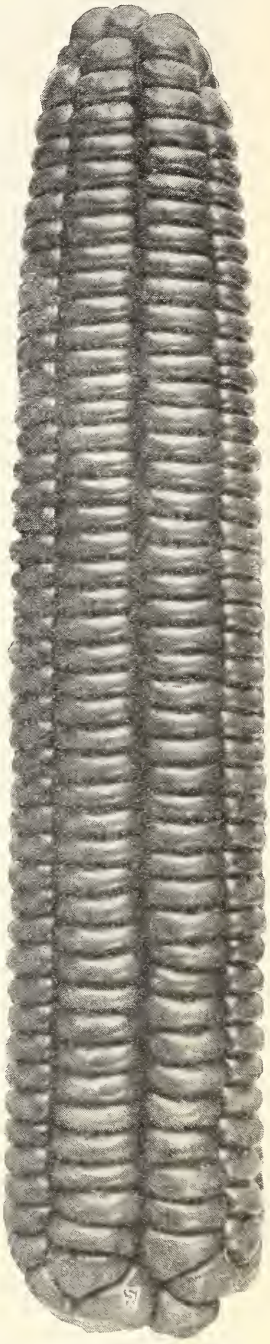
This beautiful eight-rowed Flint often yields two good ears to the stalk. Ears sometimes 15 inches long. Cobs small, kernels of good size. Safe for planting as far north as Massachusetts. Our stock of seed is of the best selection and has given a yield, this past season, of over 100 bushels to the acre. **Selected stock, qt. 25 cts., postpaid, 40 cts.; pk. $1.25, bus. $4, 10-bus. lots, $3.75 per bus.**

Pop-Corn

Treatment is similar to that of field or sweet corn. Care given in curing determines the popping qualities: place the ears under cover in thin layers with free access to the air. Sow 5 pounds per acre, in hills.

White Rice. Rough kernel. Recommended as the best general-purpose variety on account of its keeping better than others. Lb. 20 cts., postpaid, 30 cts.; 10 lbs. $1.50, 100 lbs. $12.

White Pearl. The kernels of this variety are small and smooth. Lb. 20 cts., postpaid, 30 cts.; 10 lbs. $1.50, 100 lbs. $12.



Longfellow Flint Corn

Prices subject to change

SEED OATS

For grain, 2½ bushels to the acre; for forage, 3 bushels, or, with Canada Peas, 1 to 1½ bushels

Sold at the standard weight of 32 pounds to the bushel. Several varieties of Oats offered below weigh up to 50 pounds to the measured bushel, but all Oats are purchased and sold at the standard weight of 32 pounds to the bushel.

Storm King. An exceptionally fine grade of the Long's Tartar. Kernels are large and plump. The straw is long and stout, and does not easily lodge. Heads are from 8 to 10½ inches in length. Our grower in New Jersey reported a yield of over 100 bushels per acre. Suitable for all soils. **Pk. 85 cts., bus. (32 lbs.) $2.50, 10 bus. $22.50, 100 bus., $2.15 per bus.**

Welcome Oats. One of the heaviest, handsomest, and most productive white varieties grown. It stools heavily, with extra-strong, straight straw, standing well. Succeeds well in a wide range of climate, and under a great variety of soils and methods of culture. **Pk. 60 cts., bus. (32 lbs.) $1.75, 10 bus. $16, 100 bus., $1.50 per bus.**

White Tartar. This is a western Oat which, when grown in the East in past years, has done remarkably well. Its yield was well in excess of the Swedish and Lincoln varieties. It is a heavy Oat, with long, stout straw, which stands up well without lodging. The heads are large; the grains are thick and very heavy, with a thin hull. Our seed is selected and grown especially for us. **Pk. 75 cts., bus. (32 lbs.) $2, 10 bus. $19, 100 bus., $1.80 per bus.**

Great Mogul. (Black.) A giant among Oats. Holds the highest record for yield of any black Oat on clay soils. Recommended particularly where an Oat is needed for feeding green: for this purpose its wide luxurious foliage and its tall, stiff, thick stems make it invaluable. We offer imported certified seed. **Pk. $1, bus. (32 lbs.) $3, 10 bus. $27.50, 100 bus., $2.50 per bus.**

Insure Your Seeds. Dress them with SEED PRESERVER. It prevents crows and other birds taking the seed; it protects against ground-rot and smut. It is non-poisonous and does not retard germination.

Large can, enough for 2 bushels of seed corn..... $1 50
Small can, enough for 1 bushel..... 1 00

Field of Storm King Oats

SPRING WHEAT

Saskatchewan Fife. This is the favorite sort in this locality, and is used on account of its prolific, vigorous growth and early qualities. Sow in April or May, 1½ to 2 bushels per acre broadcast or in drills. Qt. 25 cts., pk. $1.25, bus. $3.75.

SPRING RYE

Used as a catch-crop to sow where winter grain failed. **Qt. 25c., pk. $1.25, bus. $3.75, 5 bus. and over, $3.50 per bus.**

BEARDLESS SPRING BARLEY

Its straw is good for green feed or, when cured, as hay. The grain in the hull is excellent poultry-feed and with the hull removed is used in the household. It is a quick-growing crop and very nutritious. Sow broadcast 1½ to 2 bushels to the acre from May 15 to July 1. Our seed stock is carefully selected and grown especially for us in Genesee County, New York. Makes better straw than the bearded, and will yield 50 bushels of grain to the acre. **Qt. 20 cts., postpaid, 36 cts.; pk. $1, bus. $3, 10 bus., $2.75 per bus.**

SORGHUMS

EARLY AMBER SUGAR CANE. Sow 50 pounds per acre. Most valuable for dairy farmers; a favorite in the Northwest. Lb. 15 cts., postpaid 25 cts.; 10 lbs. $1.25, 100 lbs. $10.

SUDAN GRASS. A quick-growing hay and pasture crop. Sow 30 pounds per acre. Lb. 20c., postpaid, 30c.; 10 lbs. $1.75, 100 lbs. $15.

JOHNSON GRASS. Sow 25 pounds per acre. Lb. 25 cts., postpaid, 40 cts.; 10 lbs. $2, 100 lbs. $17.50.

FETERITA. Sow 20 pounds per acre. Lb. 15 cts., postpaid, 30 cts.; 10 lbs. $1.25, 100 lbs. $10.

TEOSINTE. Sow 5 pounds per acre. Lb. 60c., postpaid, 75 cts.; 10 lbs. $5, 100 lbs. $45.

BROOM CORN. Sow 20 pounds per acre. Lb. 25 cts., postpaid, 35 cts.; 10 lbs. $2, 100 lbs. $17.50.

KAFFIR CORN

A substitute for corn in semi-arid regions. The grain is used for poultry for feeding horses and fattening hogs and cattle, while, if the plants are cut for hay, a great deal of forage is obtainable. Kaffir Corn is not suitable for pasture. Culture is similar to field corn; use 15 pounds of seed per acre if grown in rows and 50 pounds if broadcasted. **Lb. 10 cts., postpaid, 20c.; 10 lbs. 85 cts., 100 lbs. $8.**

MILO MAIZE

Used for soiling and fodder. Seed 15 pounds per acre. **Lb. 15 cts., postpaid 25c.; 10 lbs. $1.25, 100 lbs. $10.**

MILLETS

These are recommended as catch-crops, that is, quick-growing varieties to take the place of corn, wheat, or other crops which may have failed. They are chiefly grown for feeding green, silage or hay; seed may be sown during May, June, and July.

Golden Millet. Grows 4 to 5 feet high and yields a heavy crop. Use 50 pounds of seed per acre. Lb. 15 cts., postpaid, 25 cts.; 10 lbs. $1, 100 lbs. $8.

Hungarian Millet. The crop is heavy, and is considered equal in value to timothy hay. Use 50 pounds of seed per acre. Lb. 15 cts., postpaid, 25 cts.; 10 lbs. $1, 100 lbs. $7.

Japanese or **Barnyard Millet.** Yields more heavily than almost any other forage plant. Grows 8 feet high. Use 15 pounds of seed per acre. Lb. 15 cts., postpaid, 25 cts.; 10 lbs. $1, 100 lbs. $7.50.

PRICES SUBJECT TO CHANGE

Vetch and Oats Sown Together

VETCHES or TARES

Vetches are relished by live stock of all kinds; they are excellent for milk-production, and their fattening properties are of high order. You may feed them green, as hay or as silage. Being legumes, they are the finest possible land-renovators, and they are strongly recommended as a plow-under crop to manure the land. The Department of Agriculture estimates the value of an acre of Vetch plowed-under as being equal to commercial fertilizer at the rate of from $16 to $40 an acre. For best results, grow Vetches in combination with oats, wheat, or rye. The cereals support the Vetches, keeping them away from the ground, and much increasing the crop.

SPRING VETCHES (*Vicia sativa*). These are highly valuable for soiling or for green-manuring. They should be sown as early as the land is dry enough to be worked without injury. When sown alone, use 150 pounds per acre broadcast, or 100 pounds in drills. If grown with oats, wheat, or rye, use ½ bushel of the cereal and 75 lbs. of Spring Vetches. Lb. 20c., postpaid, 40c.; 10 lbs. $1.50, 100 lbs. $12.

WINTER VETCHES—SAND or HAIRY VETCHES (*Vicia villosa*). These are suitable for both spring and autumn seeding, and if intended to stand over the winter, they should be sown as long before winter as possible to enable them to become established firmly. If sown alone, use 100 pounds of seed to the acre, but it is best if 50 pounds of Hairy Vetch be sown with ½ bushel of oats or other cereals, as shown in illustration at left. Lb. 30c., postpaid, 40c.; 10 lbs. $2.75, 100 lbs. $25.

They Improve Your Land

All the crops on this page are legumes, and they possess the property of transforming the free nitrogen of the air into soluble nitrates. In addition to any crop yielded, they *all result in an improved condition of the soil.*

CANADA FIELD PEAS

Canada Field Peas are a profitable crop in a variety of ways; if grown to maturity and threshed, a yield of from 30 to 60 bushels per acre of dried Peas may be expected. A combined crop of Peas and Oats is frequently grown; at maturity they may be threshed at one time and separated in cleaning. They are most widely grown in conjunction with oats and fed green, when a surprising amount of fodder is produced. Finally Peas and oats together are one of the most valuable plow-under crops.

If sown alone, use 3 bushels of seed per acre; when sown with oats, use 1½ bushels of Peas and 2 bushels of oats, sowing the Peas first, plowing under 4 inches deep and then drilling in the oats. **Qt. 25 cts., postpaid, 40 cts.; pk. $1.50, bus. (60 lbs.) $5, 10-bus. lots, $4.75 per bus.**

COWPEAS

Used for improvement of soils by plowing under; also make valuable hay, when sown alone or with soy beans, during May, June or July, at the rate of two bushels to acre or one bushel of soy beans and one of Cowpeas.

New Era. The Peas are dull lead-colored, not quite so large as Whippoorwill, but vine is somewhat stronger; earlier than other varieties. Qt. 20 cts., postpaid, 30 cts.; pk. $1.50, bus. $4.50, 10-bus. lots, $4.25 per bus.

Whippoorwill. An early, bunch-growing Pea; has brown-speckled seed. Qt. 20 cts., postpaid, 30 cts.; pk. $1.50, bus. $4.50, 10-bus. lots, $4.25 per bus.

SOY BEANS

Especially valuable for mixing with corn for silage, for the production of hay, and for use as pasture, especially for hogs. They are also valuable as a crop for plowing under for green manure.

Planted in rows 2½ feet apart, 6 to 8 plants to the foot of row, requiring three pecks to the acre, they yield fifteen to twenty tons of fodder.

Mammoth Yellow Soy Beans. Qt. 30 cts., postpaid, 45 cts.; pk. $1.25, bus. $4, 10 bus. $37.50.

Ito San. An early variety. Qt. 20 cts., postpaid, 35 cts.; pk. $1.25, bus. $4, 10 bus. $37.50.

Soy Beans

A field of Japanese Buckwheat

JAPANESE BUCKWHEAT

This is a superior variety and more prolific, and yields double the weight per acre of other sorts. The grains are nearly twice as large as those of Silver Hull, and of fine color. This variety is always in demand, millers preferring it to all other sorts, and it makes the finest flour. Sow about the middle of June, broadcast, 1 bushel to the acre. **Qt. 20 cts., pk. $1, bus. $3, 10 bus. $2.75 per bus.**

THOUSAND-HEADED KALE

An exceedingly valuable food for sheep and lambs. The crop may be drilled in in rows 2 feet apart, and the plants hoed to stand a foot apart, or occasionally the seeds are sown in a nursery bed and the seedlings transplanted. In the first case 8 pounds of seed per acre are used, and in the second 4 pounds will be found sufficient. **Lb. $1.50.**

Dwarf Essex Rape is an excellent sheep-feed

SUNFLOWER, MAMMOTH RUSSIAN

Highly valued as an excellent and cheap food for fowls. It is the best egg-producing food known. It can be raised cheaper than corn. Four pounds of seed will plant an acre. **Lb. 20 cts., postpaid, 30 cts.; 10 lbs. $1.50, 100 lbs. $12.**

SPELTZ or EMMER

One of the types of the wheat family, remarkable for its hardiness. It is occasionally used for stock-food, both as grain or cut green. Its use appears to be on the increase in the northwestern sections of this continent. It is usual to sow 100 pounds per acre. **Lb. 15 cts., postpaid, 25 cts.; 10 lbs. $1, 100 lbs. $7.50.**

FLAX or LINSEED

This crop is grown primarily for the seed for which there is a constant demand for pressing for oil and the making of cake and meal. Sow 75 pounds of seed per acre. **Lb. 20 cts., postpaid, 30 cts.; 10 lbs. $1.50, 100 lbs. $12.**

BEGGAR WEED

A leguminous plant suited to the sandy soils of the South. Gives a large yield of excellent hay. About 10 pounds per acre is the usual seeding. **Lb. 60 cts., postpaid, 75 cts.; 10 lbs. $5.50, 100 lbs. $50.**

DWARF ESSEX RAPE

The true Dwarf Essex Rape is valuable as a fattening food for pasturing sheep in autumn and it is relished also by hogs and cattle. It is particularly adapted as a "catch-crop," for it grows best late in the season. In the northern states it can be sown at any time from May until the end of August, but in the southern states it should not be sown until September or October, for winter pasture. Its fattening properties are said to be twice as good as clover. Sow ten to twelve pounds to the acre broadcast, or four to five pounds per acre in drills 15 inches apart. The plant grows very vigorously, and feeding can commence about two months after the seed is sown. Stock are turned right into the standing crop, and the expense of harvesting is avoided. Successional seedings, to maintain a continuous supply, may well be made. **Lb. 20 cts., 10 lbs. $1.50, 100 lbs. $12.**

PRICES ON GRASS AND CLOVER SEEDS ARE SUBJECT TO CHANGE

CLOVERS

Of Known Purity and Proved Vitality

All Clovers possess the property of transforming the free nitrogen of the air into soluble nitrates; in addition to the crop yielded, they *all result in an improved condition of the soil.*

Red Clover. This is the most popular and is regarded as the most valuable of the Clover family. It makes two crops each year. The first is usually cut when it is in blossom for hay; the last crop may be harvested for seed, cut for hay or plowed under to add fertility to the soil. It may be sown either in the spring or fall, and if no other grasses are used, at the rate of from ten to twenty pounds to the acre, according to quality of seed used and condition of the soil. Clover adds greatly to the fertility of the land on which it is grown. It does not exhaust the soil, but enriches it. It pays always to buy the best grade of Clover seed that can be obtained. **Lb. 40 cts., postpaid, 50 cts.; 10 lbs. $3.75, 100 lbs. $35.**

Mammoth Red Clover. Known in Europe as Perennial Cow Grass, or Pea-Vine Clover. Grows larger and lasts longer than the preceding variety, and by some is considered superior to it for forage. Valuable for reclaiming exhausted land by plowing under as green manure. Sow 10 to 20 pounds to the acre. Extra-large, plump seed. **Lb. 50 cts., 10 lbs. $4, 100 lbs. $37.50.**

Alsike, or Swedish Clover. This is one of the hardiest varieties known. It is perennial and does not winter-kill. It will do better on moist land than any other variety of Clover, and is suitable for either hay or pasture. It is frequently sown both with Medium Red Clover and with Timothy, and the quality of hay thus produced is excellent. It is finer and more leafy than Medium Clover, although it does not grow so high. Fine for honey bees, and cattle prefer it to other Clovers. **Lb. 40 cts., 10 lbs. $3.50, 100 lbs. $30.**

White, or Dutch Clover. This variety should be included in mixtures of seed for pasture and it is the best sort for lawns; it forms a close herbage and remains green throughout the season. **Lb. 75 cts., 10 lbs. $6.50, 100 lbs. $62.50.**

Wild White Clover. Genuine Wild White Clover Seed produces wiry plants that are *more permanent in character* than those originating from commercial seed: the plants are smaller and they spread very much further than the "cultivated" type. Being more robust, they withstand clover-sickness and they thrive on soils that would be too poor to support ordinary White Clover. Wild White Clover plants *assist other Clovers and grasses growing alongside them*, and European experience shows that the inclusion of so small a quantity as *one pound of seed per acre* in mixture with other Clovers and grasses for hay-fields and pastures is followed by an increase in yield amounting in some cases to 50 per cent or more. On breaking up a pasture in which it is included, the increased benefit to the soil is very marked. **Oz. $1, ¼lb. $3, lb. $10.**

Alfalfa, or Lucerne. Alfalfa possesses a wonderful root system, deep and strong, consequently it is a great drought-resister. Our seed is produced in those northern sections of the country where Alfalfa has endured the extreme cold of winter in high altitudes. **Lb. 40 cts., 10 lbs. $3.50, 100 lbs. $32.50.**

Grimm Alfalfa. There is some disagreement among investigators as to how Grimm Alfalfa obtained its hardiness, but there is no difference of opinion that it is hardy. Because of its root-system, it will grow well over a hardpan soil, and is adapted to a wetter soil than the other Alfalfa. We recommend 15 pounds of the seed, sown broadcast, to the acre, as its stooling habit requires less seed to be sown than other Alfalfa offered. The quantity of seed of this variety obtainable is limited and we offer it subject to being unsold. **Lb. 75 cts., postpaid, 85 cts.; 10 lbs. $7.25, 100 lbs. $70.**

Crimson, or Scarlet Clover. This is an annual plant. It can be seeded at any time from June to October, at the rate of fifteen to twenty pounds to the acre, and makes the earliest possible spring pasture, blooming the latter part of April or May, and for feeding as hay, should be cut just before coming into full bloom. **Lb. 25 cts., postpaid, 35 cts.; 10 lbs. $2.25, 100 lbs. $20.**

Sweet Clover, or Bokhara Clover. White Melilotus. Farmers are sowing this Clover to quite a considerable extent on light, sandy land, where other Clovers do not take well. They hope, by sowing Sweet Clover, to get a good growth to turn under to improve the land and also to inoculate the soil so that it will produce good crops of Crimson Clover and Alfalfa from seedlings of these to follow the Bokhara. For feed or forage it should be cut when quite young, for when it gets old, cattle do not relish it, and it is not of very high nutritive value. It is also largely used for sowing for bees. **Lb. 25c., postpaid, 35c.; 10 lbs. $2.25, 100 lbs. $20.**

Yellow Sweet Clover. A yellow-flowered counterpart of the above. **Lb. 30 cts., postpaid, 40 cts.; 10 lbs. $2.75, 100 lbs. $25.**

Hubam. Annual White Sweet Clover. Hubam is a variety of Bokhara or White Sweet Clover which was discovered a few years ago by the Iowa Experiment Station; it has since been improved. While ordinary Sweet Clover, and most other Clovers, do not give a profitable return until the second year from seeding, Hubam will produce a bumper crop and *attain mature growth in the first season.* It will in six months yield a growth of from 3 to 7 feet, and in some cases 8 and 9 feet, this depending upon the locality, soil, and season. Hubam is even more drought-resistant than the ordinary type, and, like it, is the greatest bee-pasture known. We offer scarified seed. **Lb. 75 cts., 10 lbs. $6.**

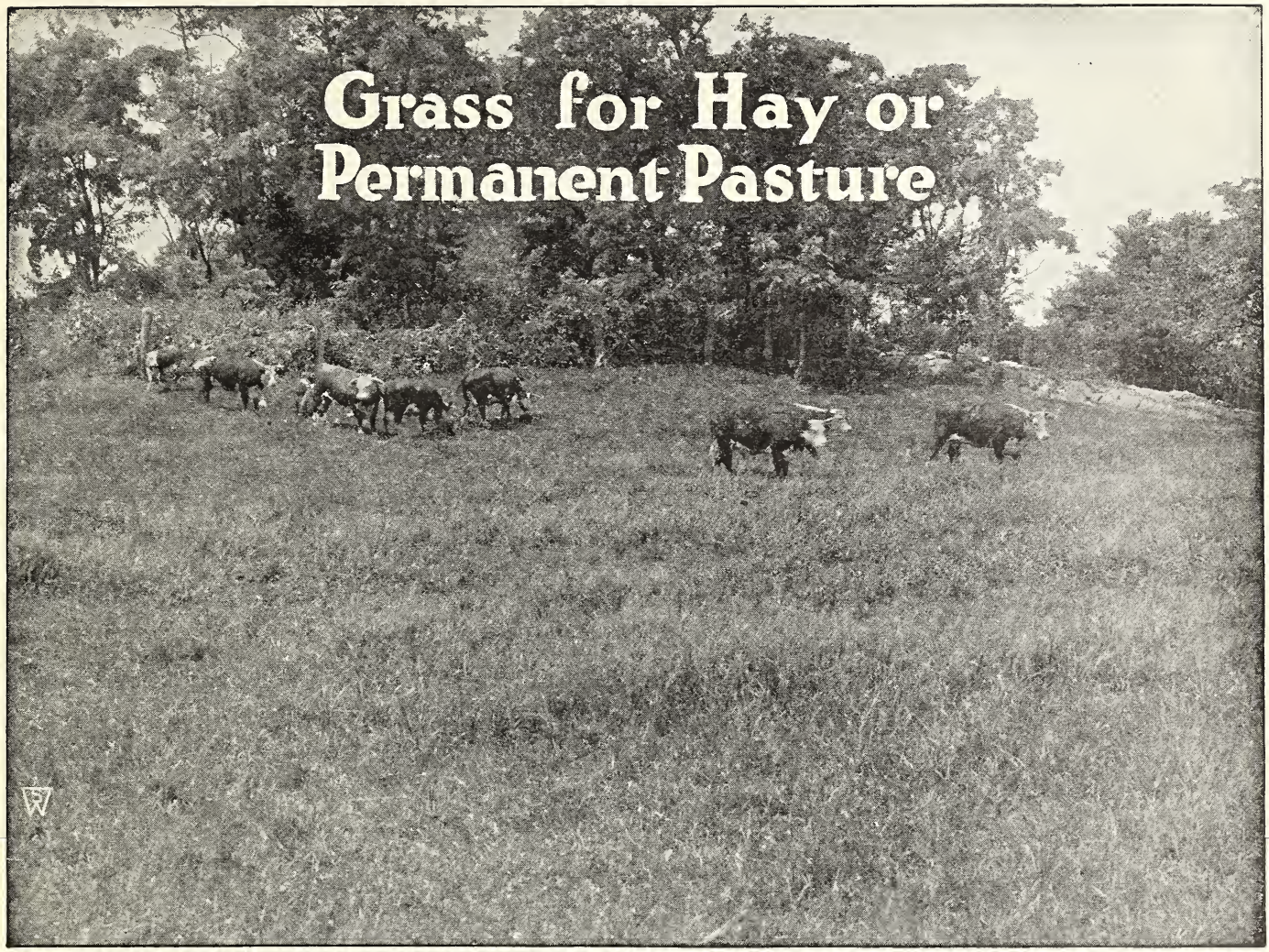
Yellow Suckling Clover. A small Clover plant with yellow blossoms, sometimes recommended as an ingredient in pasture mixtures and in lawns. Price on application.

Black Medick, or Trefoil Clover, Yellow Clover. One to two pounds per acre may, with advantage, be included in all pasture seeds for poor land, except where it is quite devoid of lime. If sown alone, 30 pounds of seed per acre are used. Price on application.

Japan Clover, or Lespedeza. A pasture and hay plan' much used in the southern states, where it will give good results even on the poorest soils. Used quite largely for lawn purposes in the territory suited to it. Use 25 pounds of seed per acre. **Lb. 40 cts., postpaid, 50 cts.; 10 lbs. $3.75, 100 lbs. $35.**

Mixed Clovers. For pasture and hay-fields. Use 25 pounds per acre when sowing new land, but for renovating existing fields, use 10 pounds. **Lb. 45 cts., postpaid, 55 cts.; 10 lbs. $4.25, 100 lbs. $40.**

Red Clover



For every different kind and condition of soil there are a large number of grasses, either indigenous or introduced, which are especially suitable. Some sorts do best on high ground and in dry weather; others prefer plenty of moisture. Some mature so early and others so late that from the beginning of spring until winter sets in there is no time when one species or another is not at its best. From these considerations, the importance of sowing many varieties for pasture and meadow purposes will be apparent, consisting of the following varieties: Orchard Grass, Meadow Foxtail, Sheep's Fescue, Rhode Island or Creeping Bent, Hard Fescue, Sweet-scented Vernal (True Perennial), Meadow Fescue, English Rye Grass, Italian Rye Grass, Red Top, and Timothy, blended in proportions which we have found, from actual use, give the most satisfactory results.

On ordinarily fertile soil 80 pounds of this mixture are sufficient to seed an acre, but where the land is poor a larger quantity will be necessary.

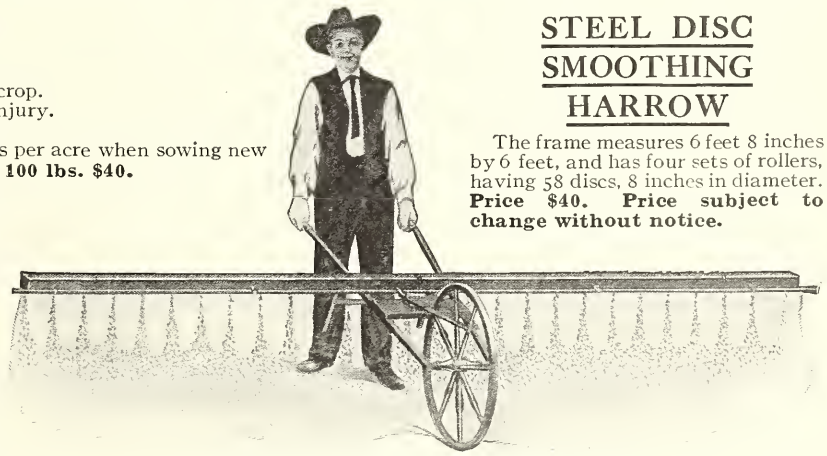
For Hay and Permanent Pasture for Light Soils.
For Hay and Permanent Pasture for Medium Soils.
For Hay and Permanent Pasture for Heavy Soils.
For Orchard and Shady Places.
For Hay Only. Specially recommended for large hay crop.
For Pasture Only. Will stand close cropping without injury.
Mixed Grasses. Lb. 45 cts., 10 lbs. $4, 100 lbs. $35.
Mixed Clovers for pasture and hay-fields. Use 20 pounds per acre when sowing new land. **Lb. 45 cts., postpaid, 55 cts.; 10 lbs. $4.25, 100 lbs. $40.**

S. & W. CO.'S WHEELBARROW GRASS SEEDERS

On the market over thirty years and over 200,000 sold. For sowing all kinds of grass seeds broadcast, clover, timothy, alfalfa, Hungarian millet, rape and all small seeds. Also all chaffy seeds like red top, orchard grass, and clean blue grass, bent grass, any quantity per acre desired. They are no experiment, and are guaranteed to do an even, accurate, first-class job of seeding. **Price (14 feet sowing area) $16.50; with additional hopper, for broadcasting Bordeaux powder, tobacco dust, etc., $27.**

STEEL DISC SMOOTHING HARROW

The frame measures 6 feet 8 inches by 6 feet, and has four sets of rollers, having 58 discs, 8 inches in diameter. **Price $40. Price subject to change without notice.**



S. & W. Co.'s Wheelbarrow Grass Seeder

GRASS SEEDS OF KNOWN PURITY AND PROVED VITALITY

The Grass Seed problem, whether applied to the farm or lawn, is one that can be rightly solved only when the grower fully takes into consideration four essential details: SEED, SOIL, LOCATION, and CLIMATE. Advice regarding mixtures for special locations freely given on request.

*The "Ligule" is a small membranous lip found on the inside of the leaf at a point where the leaf and stem part company. If a grass shoot be cut across with a knife, the leaves will be found folded flat with some varieties and rolled in others. The ligule and the manner of folding are important means whereby varieties may be distinguished.

†Indicates desirability of using mixtures rather than one variety for lawns. ‡Dwarf habit indicates suitability of a variety for lawns.

Variety	Description* Enables you to distinguish varieties in your turf	Period of Maximum Development †	Use	Soil Suitable	Height Ins. if Uncut ‡	Weight Per Bushel	Price Lb.	Price 10 lbs.	Price 100 lbs.
AGROSTIS VARIETIES OR BENTS									
South German Mixed Bent, Creeping Bent, Fiorin (*Agrostis species*).	"Creeping Bent," a name used for many years for seed collected in Central Europe; and consisting of a mixture of *A. vulgaris, A. canina, A. palustris.*	Early fall	Makes velvet-like, thick, beautiful, soft putting-greens and lawns; used largely in conjunction with Red Fescue.	All; especially moist land.	12				
			Superfine Quality	...	...	24	$3 00	$27 50	$250 00
			Fine Quality	...	...	16	2 75	25 00	225 00
Colonial Bent (*A. tenuis; A. vulgaris*).	Blades very narrow, flat. Slightly creeping. Forms a brownish green velvety turf. Leaves are rolled in the bud.	Early fall	Splendid for putting-greens and fine lawns. Identical with Rhode Island Bent.	All soils.					
			Superfine Quality	...	18	24	2 75	25 00	235 00
			Fine Quality	...	18	18	2 50	22 50	215 00
Red Top (*A. palustris; A. alba*).	Leaf-blades narrow, becoming very narrow with turf cultivation; plants slightly creeping. The young leaves are rolled in the bud. Prominent ligule.	Early fall	Valuable for the farmer and lawn-maker alike.	All soils.	18				
			Superfine Quality	...	...	36	40	3 50	32 50
			Recleaned Quality	...	...	32	35	3 00	27 50
			Ordinary Good Commercial Quality (unhulled)	...	...	18	25	2 00	17 50
POA VARIETIES OR MEADOW GRASSES									
Canadian Blue Grass (*Poa compressa*).	Leaf-blades narrow, flat; plants slightly creeping; stems flattened; color gray-green.	Early summer	Used by the farmer and lawn-maker, but Kentucky Blue Grass is more desirable.	All; clays and those with lime.	12	18	$0 45	$4 00	$37 50
Kentucky Blue Grass (*P. pratensis;* June Grass).	Leaf-blades very narrow, flat; plants slightly creeping. Deep vivid green. More effective the second year than the first. Ligule short and thick. The young leaves are folded in the bud.	Early summer	Ideal ingredient in fairway mixtures; frequently used for putting-greens. Largely employed for lawns; makes the best, sweetest, and most nutritious pasture.	All; particularly those containing lime.	12				
			Superfine Quality	...	...	27	65	6 00	50 00
			Fine Quality	...	...	21	50	4 50	40 00
Rough-stalked Meadow Grass, Bird Grass (*P. trivialis*).	Leaf-blades narrow, flat; plants not creeping. The young leaves are folded in the bud. Lower surfaces of leaves glossy.	Early summer	Suited for putting-greens, fairways or lawns under trees. Quite the best grass for shaded situations. Makes an exquisite turf.	All soils, including sandy.	12	26	85	8 00	75 00
Wood Meadow Grass (*P. nemoralis*).	Leaf-blades narrow, flat. Medium dark green. The young leaves folded in the bud. Leaf joints black.	Late spring	Of limited use in America; cannot be traced as permanently adapted to our climatic conditions.	All of medium texture.	12	20	1 10	10 00	95 00
FESTUCA VARIETIES OR FESCUES									
Hard Fescue (*Festuca duriuscula*).	Leaves wire-like; plants tend to grow in tufts.	Late spring	A valuable pasture and lawn variety when mixed with other grasses.	Sandy, thin, dry soils	12	20	$0 50	$4 50	$40 00
Red Fescue (*F. rubra*), **Chewing's, N. Z.**	Leaves wire-like and stiff, not flat; plants have a tendency to creep, but frequently form tufts.	Summer	Excellent for putting-greens, tees, and fairways; also hay- and pasture-fields. Gives fair results under trees.	Satisfactory on poor land.	12	27	55	5 00	45 00
Red Fescue, European.	.....	.....	.....	.....	12	27	55	5 00	45 00
Sheep's Fescue (*F. ovina;* English Fescue).	Leaves wire-like and stiff, not flat. Ligule reduced to short ears.	Late spring	Occasionally used on sheep pastures; excellent for the "rough" on golf-links.	Any except wet land.	12	16	50	4 50	40 00
Fine-leaved Sheep's Fescue (*F. ovina angustifolia; F. capillata; F. tenuifolia*).	Leaves wire-like and stiff, not flat; very fine. Color a beautiful dark green.	Late spring	Used on putting-greens and tees. Gives fair results where situation is shaded.	Any dry soil.	12	22	1 10	10 00	90 00
Various-leaved Fescue (*F. heterophylla*).	Bottom leaves are bristly; upper leaves flat. Fine dark green. Plants of a tufted habit.	Late spring	Used to a limited extent on tees and fairways; also of value as an ingredient in hay and pasture mixtures.	Light soils, rich in humus.	15	15	1 00	9 00	80 00
Meadow Fescue (*F. pratensis*).	Leaves very broad and flat. Base of leaf-sheaths red. The young leaves are rolled in the bud.	Summer	Gives an abundance of fodder as a hay or pasture grass. Useful to the golfer only for the "rough."	Any soil unless water-logged.	36	27	30	2 50	22 50
Tall Fescue (*F. elatior*).	Leaves medium broad and flat.	Summer	A nutritive variety of which cattle are very fond.	Any.	48	22	45	3 75	35 00

GENERAL LIST OF GRASSES, continued

Variety	Description* Enables you to distinguish varieties in your turf	Period of Maximum Development†	Use	Soil Suitable	Height Ins. if Uncut ‡	Weight Per Bushel	Price Lb.	Price 10 lbs.	Price 100 lbs.
LOLIUM VARIETIES OR RYE GRASSES									
English Rye Grass (*L. perenne*).	Leaves narrow and flat, smooth and shining; leaf-bases red. Usually lives three years. The young leaves are folded in the bud.	Summer	A rapid grower and of value as a "nurse grass" under some conditions; particularly useful where a lawn is needed quickly; valuable for hay and pasture.	Medium soil well supplied with moisture.	24	28	$0 30	$2 50	$22 50
Pacey's Perennial Rye Grass (*L. perenne Pacey*).	A smaller-seeded, finer-leaved, smaller plant than the above.	Summer	Superior to the above for turf purpose; claimed to be more resistant to cold.	As above.	24	30	30	2 75	25 00
Italian Rye Grass (*L. Italicum; L. multiflorum*).	An annual grass with a tendency to grow in tufts; tall; broad, flat leaves. Base of sheaths red. The young leaves are rolled in the bud.	Early summer	In the North occasionally valuable as a "nurse grass." Gives mammoth hay crops on rich land. In the South makes excellent winter turf, following Bermuda Grass.	Medium soil well supplied with moisture.	36	22	30	2 50	22 50
Wimmera Rye Grass (*L. subulatum*).	An annual grass much used in hot climates.	Summer	Gives mammoth returns on rich land.	As above.	36	24	40	3 75	35 00
BROMUS VARIETIES OR BROME GRASSES									
Awnless Brome Grass (*Bromus inermis*).	A large-growing perennial stoloniferous grass.	Summer	Useful for binding the soil of embankments. A pasture grass recommended for the dry soils of the Northwest.	Any.	30	14	$0 30	$2 75	$25 00
Prairie or Rescue Grass (*B. Schrœderi*).	A coarse, harsh annual.	.....	Used in the South as a winter grazing grass.	Any.	30	18	30	2 50	22 50
SUNDRY VARIETIES									
Bermuda Grass (*Cynodon dactylon; Capriola dactylon*, Scutch Grass).	A medium broad-leaved grass, strongly creeping. Does not survive winter north of Virginia.	Early fall	Valuable in the South for putting-greens, fair-greens, and lawns; also for pastures and hay-fields. Binds sand.	All soils.	12	36			
			Superfine Quality	.....	...	...	$0 60	$5 75	$55 00
			Fine Quality	.....	...	...	45	4 25	40 00
Carpet Grass (*Axonopus compressus*).	A coarse perennial with creeping root stocks.	Summer	Satisfactory turf grass for the moist sandy soils of Florida.	Moist sands.	12	24	50	4 75	45 00
Crested Dog's-tail (*Cynosurus cristatus*).	Leaves narrow and flat. The young leaves are folded in the bud. Base of leaf-sheaths yellow.	Early summer	Of limited usefulness in this country.	Hard, dry loams.	24	30	70	6 50	60 00
Dallas Grass (*Paspalum dilatatum*).	A strongly growing perennial.	Summer	Gives splendid grazing summer and winter in the South.	All soils.	30	20	1 25	12 00	110 00
Meadow Foxtail (*Alopecurus pratensis*).	Medium broad, flat leaves. Flower-heads resemble timothy. Base of leaf-sheaths violet. The young leaves are rolled.	Late spring	As a field-grass gives large yields early.	All soils.	36	10	95	9 00	85 00
Orchard Grass (*Dactylis glomerata;* Cocksfoot).	Large plant, bluish green in color, with flattened leaf-bases. Ligule prominent. The young leaves are folded in the bud.	Late spring	Widely used for hay and pasture, for which purposes it is of additional value in that it thrives under trees.	All soils.	48	14	40	3 50	30 00
Rhodes Grass (*Chloris virgata*).	A large, coarse perennial.	Summer	A splendid hay crop for the South.	All soils.	36	25	90	8 50	80 00
Sweet Vernal (*Anthoxanthum odoratum*).	Narrow, flat leaves. The young leaves are rolled in the bud; leaf-sheaths hairy.	Late spring	Very fragrant when drying. Occasionally used in mixtures of seeds for hay-fields.	All soils.	18	10	1 50	13 00	120 00
Tall Oat Grass (*Avena elatior, Arrhenatherum elatius;* False Oat Grass).	Very broad leaves; plant has the appearance of a slender, small oat.	Early summer	Valuable for hay and pasture.	All soils.	48	14	60	5 50	50 00
Timothy (*Phleum pratense;* Herd's Grass; Cat's Tail).	Very broad leaves; coarse, vigorous plant. Ligule small, pointed. Young leaves rolled in the bud.	Summer	The most important American grass for hay and pasture.	Rich land.	36	45	20	1 75	15 00

FURTHER INFORMATION ON GRASSES: For further reading on this subject we recommend:

"Golf Turf." Production and maintenance of golf links, lawns, and tennis courts. 56 pages, illustrated. Mailed free on request.

"Text Book of Grasses." Cultural notes for the farmer and botanical descriptions. 276 pages, many illustrations. A. S. Hitchcock. Price, with postage, $2.25.

"Turf for Golf Courses." Authoritative and practical treatise on the production of turf. 262 pages, with photographs and maps. C. V. Piper and R. A. Oakley. Price, with postage, $3.

Grass Seeds for Golf

EXTREME PURITY NECESSARY.—A club annually spends a large sum for the purpose of removing weeds from greens, tees, and, in some cases, fairways. The seeds from which these weeds spring may be already in the soil, and they further may be washed onto the green, blown onto the green, and deposited there by birds or other agencies. It is obviously unwise to add to these weeds, which ordinarily find their way onto a golf course, by sowing more weed seeds—in other words, by sowing seeds which could, by dint of a little more care and trouble, be made freer of weed seeds. No golf club need ever sow any seeds which have not been cleaned and recleaned to the highest point of perfection. Such seeds cost a few cents per pound more than commercial stocks, but such a slight extra charge is offset again and again by the saving in the club's labor bill for weeding. Further, you will invariably get *more seeds of the kind you want* in a pound of seed that has been thoroughly recleaned than you will from seeds that have not been so thoroughly purified, because along with the weed seeds, empty husks and other materials are withdrawn by the cleaning. Very often the highest-priced seed is really cheaper (by actual count of seeds) than the lower-priced seed.

Putting-Green Mixtures

WHY USE MIXTURES? You may sow one variety of grass only if you wish; good results are often obtained and some authorities recommend it, but we do not. Rather than seeding with one kind, we prefer the use of mixed seeds. An established green from a mixture of varieties gives a good turf quickly, one that is more uniform through the year and is less likely to suffer badly from extremes of climate or from attacks of fungous disease. The use of mixtures as against separate varieties has the practical support of many years' experience.

Standard Putting-Green Mixture

Recommended for light, dry soils

This is composed of Mixed Bent (that is, genuine German Creeping Bent) fancy recleaned Red Top, and Chewing's New Zealand Red Fescue—all of high purity and strong vitality. The formula we use is a thoroughly proved one, well balanced and absolutely reliable. **Lb. 75 cts., 5 lbs. $3.50, 25 lbs. $16, 100 lbs. $60.**

Special Putting-Green Bent Formula

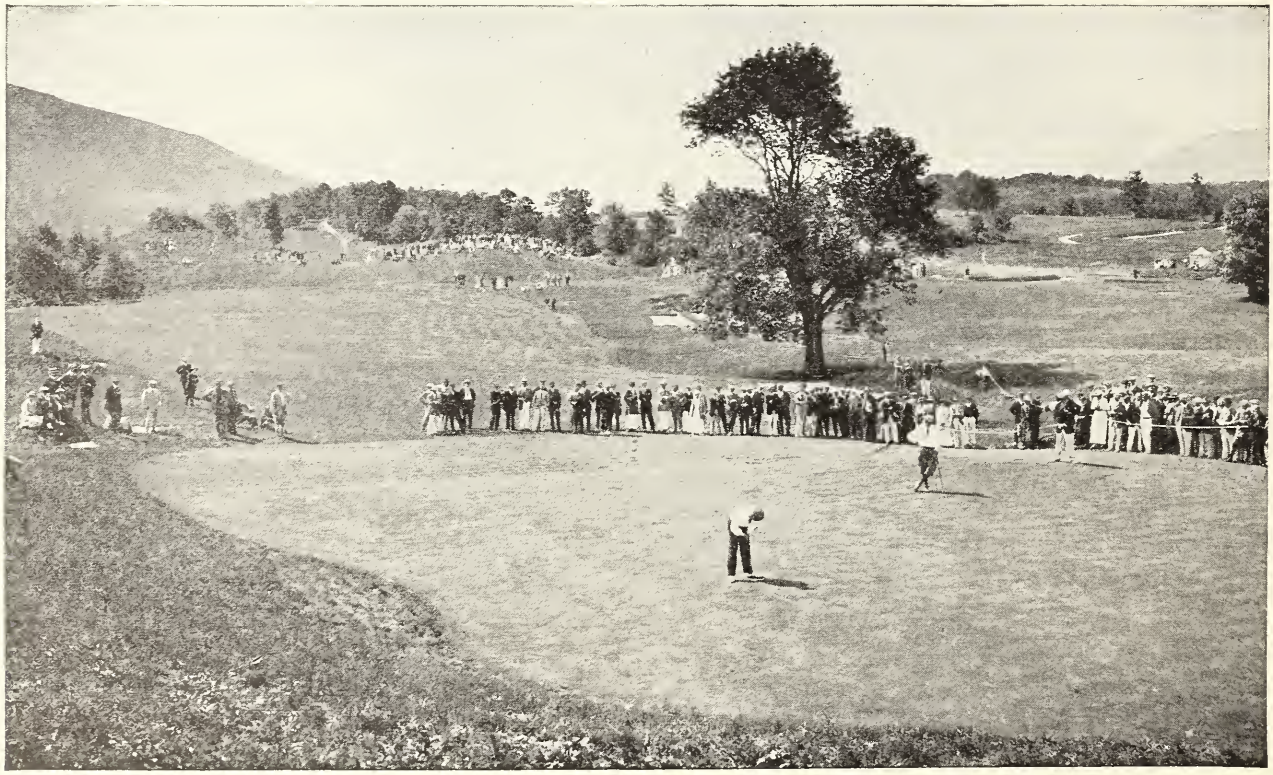
Recommended for well-prepared, rich soils

Mixed Bent, containing Velvet Bent and Carpet Bent, formerly widely sold under the name of "Creeping Bent," is exceedingly scarce and high-priced, On account of its wonderful fineness it is sometimes desirable to sow a mixture containing an increased proportion of this fine grass. **Lb. 90 cts., 5 lbs. $4.25, 25 lbs. $20, 100 lbs. $75.**

The weight of a measured bushel of the above mixtures is 25 pounds

QUANTITY OF SEED REQUIRED.—There is considerable variation of opinion on this point, but we generally find long-experienced turf-growers lean toward heavy seeding: we have known many cases of disappointment traceable to too light seeding; it is rare to see a case where seed has been sown so thickly that failure has occurred. Use 75 to 100 pounds of mixed seeds when seeding a new putting-green of average size; 25 pounds per green is a usual allowance when applying seed for renovating a worn turf.

"GOLF TURF" is the title of our free book on the problems of the greenkeeper. Chairmen of Greens Committees and others interested are invited to send for a copy.



The seventh green on the beautiful Ekwanok Golf Course at Manchester, Vt. Grass Seed supplied by Stumpp & Walter Co. for eleven successive seasons

Grass Seeds for Golf

Above: The Summerlea Golf Club, Montreal, Canada, used Stumpp & Walter Co.'s seeds exclusively in sowing their course, August, 1922. A fine, thick, mat-like turf on their entire twenty-seven holes resulted in less than two months.

Fair-Green Mixtures

It is essential that the proper grass varieties be grown on a fairway: very often grasses are used that are not fit to make a proper golf sod. It is essential, too, that only seeds of the best quality be used. When ordering let us know if your soil is sandy, clayey, moist, or dry: we adapt our formula to your conditions so that an even, tough and lasting turf is secured.

Superfine Quality. The weight of a measured bushel is 25 pounds. **Lb. 55 cts., 5 lbs. $2.50, 25 lbs. $11, 100 lbs. $40.**

Fine Quality. The weight of a measured bushel is 20 pounds. **Lb. 40 cts., 5 lbs. $1.75, 25 lbs. $8, 100 lbs. $30.**

Quantity of Seed Required.—We like to sow from 200 to 250 pounds of mixed seeds to the acre—that is for seeding new areas. To renew thin fairways from 50 to 100 pounds per acre are usually sown.

FERTILIZERS FOR GOLF

For stimulating and feeding the Bent and Fescue grasses we recommend, for putting-greens, our Emerald Grass Fertilizer, price $75 per ton, and our Anti-Clover Fertilizer, price $80 per ton; the latter is to be preferred for top-dressing where there is an excess of clover, *poa annua,* or yarrow in the turf. For fairways use our Fairway Fertilizer, price $50 per ton. For new work use 100 to 200 lbs of fertilizer per green and 1,000 to 2,000 lbs. per acre; one-half these quantities when top-dressing turf.

Below: On the greens at New Saranac Inn, a delightful eighteen-hole course in the heart of the Adirondack Mountains. **Right:** During the 1921 Women's Championship at Hollywood, N. J. Both clubs are users of Stumpp & Walter Co.'s grass seeds.

INSPECTION OF GOLF COURSES

A part of our service is to make personal inspections of golf-courses and advise with you on the ground. Usually we can arrange to do this without cost to you—we suggest that you write us.

GRASS SEEDS FOR GOLF

No. 18 Green, Canoebrook Country Club.
Stumpp & Walter Seeds used

SPECIAL DIVOT FORMULA

Always Keep a Bag in Stock

A mixture consisting of (*a*) seeds of fine, strong wearing, *permanent* grasses suitable for fairways and tees, with (*b*) seeds of the quickest growing plants we know that are of a *temporary* nature. The temporary plants grow immediately, and in a day or two you cannot locate the divot; in the course of a few weeks, with cutting, the temporary plants disappear, leaving the permanent grasses, now established, in full possession of the soil.

No. 3 Green, Corry Country Club.
Stumpp & Walter Seeds used

How to use Divot Formula. Take two pailfuls of screened soil; with one of them mix thoroughly 2½ pounds of Divot Formula. Fill the divot with unmixed soil, and scatter a ¼-inch layer of the mixed soil and Divot Formula over it; press smooth with the foot. For ideal results tees should be inspected and treated in this way after each day's play, and fairways once a week.

Lb. 60 cts., 5 lbs. $2.75, 25 lbs. $12.75, 100 lbs. $50

SPECIAL MIXTURE FOR TEES. Our formula includes only those varieties which will stand rough usage and recuperate quickly after excessive wear. **Lb. 55 cts., 5 lbs. $2.50, 25 lbs. $11.75, 100 lbs. $45.**

SPECIAL "ROUGH" FORMULA. Consists of the taller-growing hardy perennial grasses in combination with gorse, yarrow, and other plants suitable for the purpose and least likely to give serious trouble as weeds should their seed be carried by the wind and other agencies on to your greens or fairways. **Lb. 50 cts., 5 lbs. $2.25, 25 lbs. $10, 100 lbs. $35.**

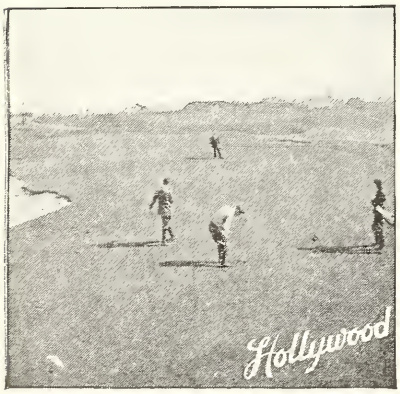
Norwood Golf Club
Stumpp & Walter Seeds used

WHITE CLOVER (*Trifolium repens*). Do not use for putting-greens, but it is occasionally recommended for fairways and tees. We offer the finest sample procurable. **Lb. 75 cts., 5 lbs. $3.25, 25 lbs. $16, 100 lbs. $62.50.**

GORSE, or FURZE (*Ulex Europæus*). This shrub makes British courses bright with its yellow blossoms in the spring. It is a slow grower and it will be some years before it will be effective. Broadcast ten pounds per acre over the "rough" and harrow in. Not recommended for the extreme North. **Lb. $1.50.**

MIXED FESCUES FOR BUNKERS. A mixture of Red, Hard, Dwarf, Fine-leaved, Various-leaved, and Tall Fescues. Excellent for mounds, bunkers, and exposed sandy situations in the "Rough." **Lb. 85 cts., 5 lbs. $3.75, 25 lbs. $18, 100 lbs. $65.**

YARROW (*Achillea millefolium*). A deep-rooting, drought-resisting plant with delicate, fern-like leaves, sometimes used in mixtures for tees or putting-greens. If sown alone use 1 pound per 500 square feet. **Lb. $2.50.**



No. 17 Putting-Green, Hollywood Golf Club.
Stumpp & Walter Seeds used

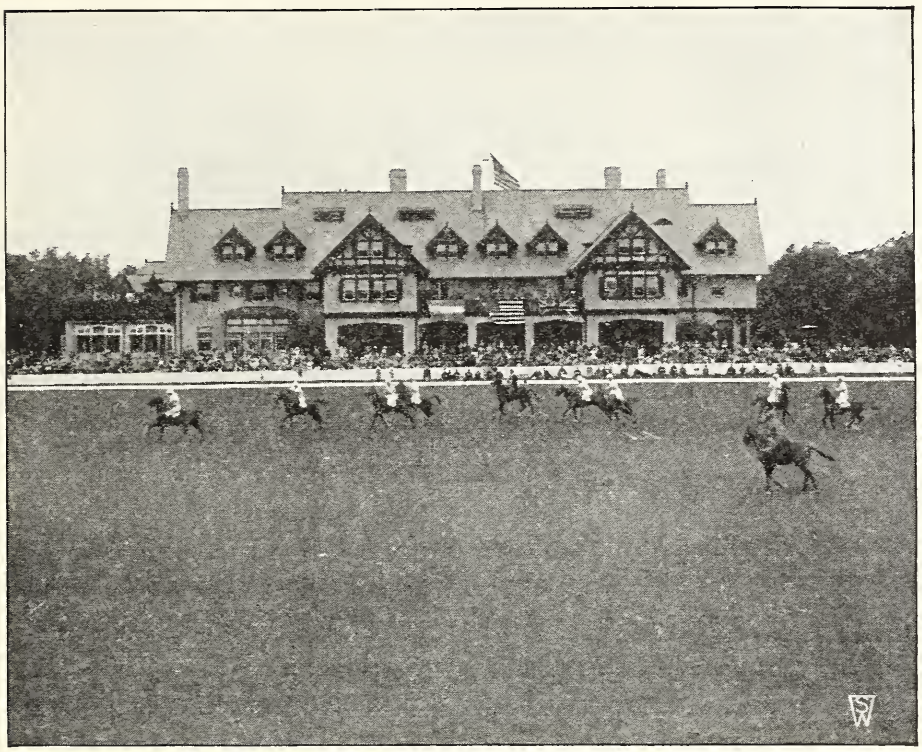
Greenkeeping Problems

You will be interested in the questions discussed in "Golf Turf." Some of the most helpful topics are:

The Building of a New Course
The Renovation of Putting-Greens
When to Sow Grass Seed
Weeds in Newly Sown Turf
Vegetative Greens
Winterkill
Grubs
Fungous Disease, etc.

"Golf Turf" is mailed free on request, and we will be more than pleased to send you a copy.

No. 15 Green, New Course, Essex County Country Club. Stumpp & Walter Seeds used



Finals between Argentine and Meadowbrook, 1922, at the Rumson Country Club, N. J. Polo field produced from Stumpp & Walter Co.'s seeds

GRASS SEEDS FOR POLO

For fine, uniform, hard-wearing, and quickly recuperating turf we find that the formula of grass seeds as long used at the famous English field at Hurlingham gives the utmost satisfaction in this country.

The grasses used are of the best superfine quality, of the highest purity and strongest vitality. Use 200 pounds per acre.

Hurlingham Formula, Superfine Quality

The weight per bushel is 25 pounds. **Lb. 60 cts., 5 lbs. $2.75, 25 lbs. $12.75, 100 lbs. $50.** Charges prepaid when cash accompanies order.

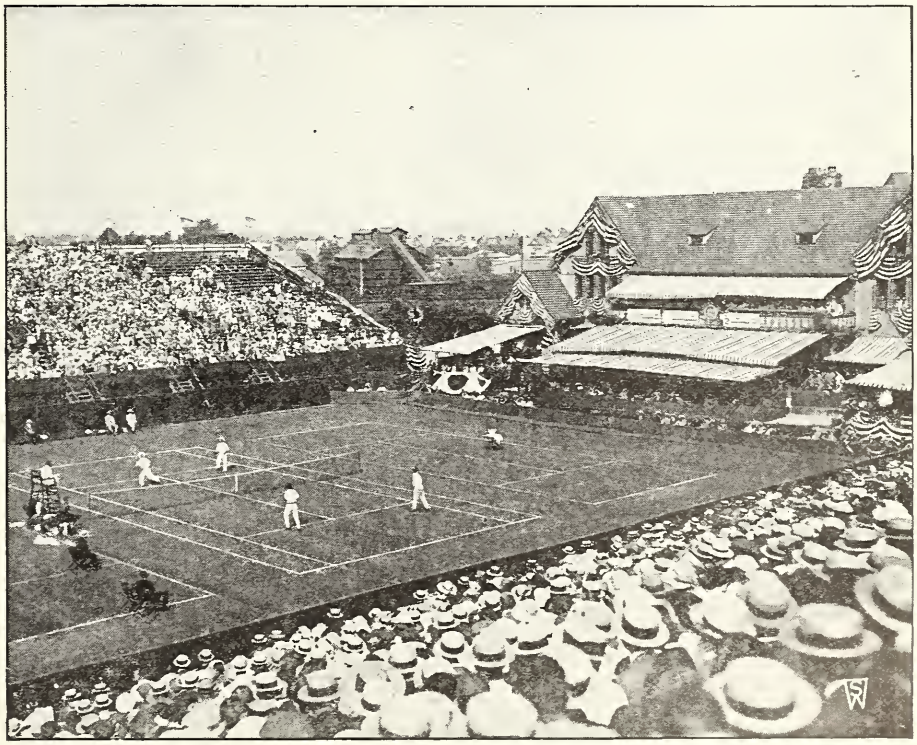
Inspection of Turf

A part of our service is to make personal inspections of polo fields, tennis-courts or golf courses and advise with you on the ground. Usually we can arrange to do this without cost to you—we suggest that you write us.

GRASS SEEDS FOR LAWN TENNIS

The turf required for lawn tennis must be firm and yet elastic, and composed of grasses which can be mowed close and kept exceedingly dwarf. This mixture is composed of the best-known, fine-leaved, deep-rooting grasses, properly proportioned so as to give an even playing surface throughout the year. It is advisable to sow more than the quantity used for ordinary lawn purposes, of these fine-leaved grasses, in order to obtain proper playing turf. At least one pound to 100 square feet is advisable on new seeding, and where bowling greens are desired, or several courts are to be made, it is advisable to consult us, and we will be glad to suggest special formulas to suit soil and locations. **Qt. 50c., 4 qts. $1.75, 8 qts. $3.25, bus. $12, 10 bus. $115.** Charges prepaid when cash accompanies order.

"Golf Turf" contains pages of detailed information on the production and care of a tennis-court. It is free, and we suggest that you write for a copy.



Davis Cup Double at Forest Hill, 1922. Grass seeds have been supplied here for a number of years by Stumpp & Walter Co

HOW ABOUT YOUR LAWN?

Staigreen LAWN SEED
BEST ON EARTH

25-Pound *versus* 14-Pound LAWN SEED

Many low-priced Grass Seed mixtures weigh only 14 pounds per bushel. This indicates either a good proportion of chaff or some of the real good varieties in the rough state, not properly cleansed so as to leave only the vital part and less of the chaff or shell—in other words, so many less seeds to the quart or pound that will germinate and grow real grass.

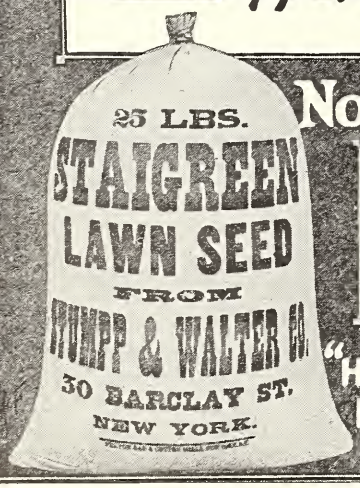
Why Not Buy the Re-cleaned Kind—

A mixture of grasses weighing 25 pounds per bushel, of high germination and purity, permanent in nature, the varieties carefully proportioned so that they will succeed one another in brightness of foliage, with the result that the lawn, even in its first year, will have a bright, rich green color from early spring until covered by snow?

Stumpp & Walter Co

One Pound will sow a Plot 20 x 20 feet
Sow 80 Pounds to the Acre

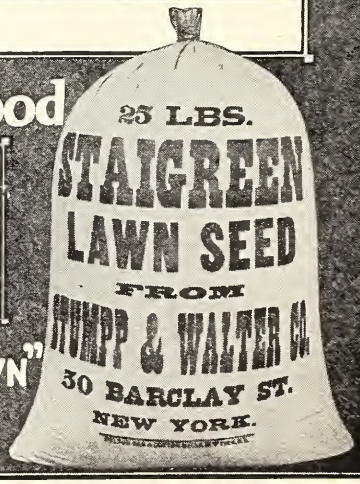
30 and 32 Barclay St.
New York



Not How Cheap, But How Good

DELIVERED ANYWHERE IN UNITED STATES					
Lb. 60 cts.	2½ lbs. $1.40	5 lbs. $2.75	12½ lbs. $6.50	25 lbs. $12.00	100 lbs. $47.50
DELIVERED ANYWHERE IN UNITED STATES					

"HOW TO BUILD A PERMANENT LAWN" PAMPHLET FREE IN EVERY BAG



SHADY PLACE LAWN SEED

S. & W. Co.'s Shady Place Lawn Grass

By using the correct seed varieties it is generally not at all difficult to obtain a good turf under trees. In particularly stubborn cases, where the shade is very dense, it is desirable to add lime every fall, dig lightly every spring, apply Pulverized Sheep Manure, rake and sow Shady Place Lawn Seed. A lawn under trees is the most beautiful of all. S. & W. Co.'s Shady Place Lawn Seed will produce it. Use as a minimum allowance one quart for each 15 by 15 feet or 4 bushels per acre; sow at half these rates when renovating a lawn.

Qt. 50 cts., 4 qts. $1.65, 8 qts. $3, bus. $10, 10 bus. $97.50. Charges prepaid when cash accompanies order. Weighs 20 lbs. per bushel.

The Two Best Lawn Dressings

For use when preparing land for grass or feeding established turf.

EMERALD GRASS FERTILIZER. 5 lbs. 45 cts., 10 lbs. 80 cts., 25 lbs. $1.75, 50 lbs. $3, 100 lbs. $5.50, 500 lbs. $22, ton $75.

PULVERIZED SHEEP MANURE. 5 lbs. 40 cts., 10 lbs. 75 cts., 25 lbs. $1.50, 50 lbs. $2.75, 100 lbs. $5, 500 lbs. $18, ton $65.

Apply Emerald Grass Fertilizer, which is a mixture of chemicals, either spring, summer, or early fall; on new land use one ton per acre or one pound to each 25 square feet. Use Pulverized Sheep Manure, in addition, on land which is sandy, poor, and deficient in humus, at the rate of two tons per acre or two pounds to each 25 square feet—you may with safety dig in sheep manure in larger quantities. For nourishing established lawns, one-half the above allowances may be used.

These two fertilizers are sent, charges prepaid, in 100-pound lots or more, when cash accompanies order. Customer pays transportation on less than 100 pounds.

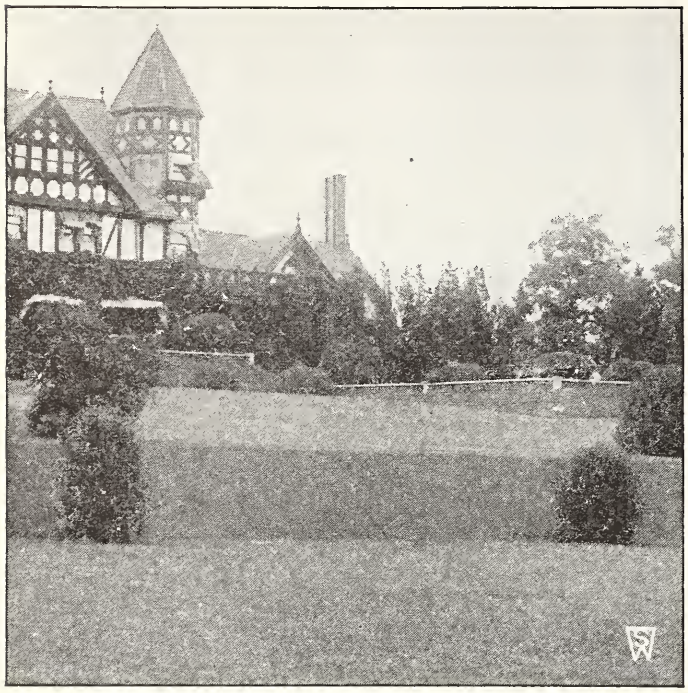
SOUTHERN LAWN SEED

From central Virginia south the ordinary northern grasses will not thrive permanently, and good results are not likely to follow the use of the customary mixtures. As a result of an intimate knowledge of southern conditions we offer a special formula which we find is highly satisfactory. We advise that two seedings be made, one in spring and one in fall, allowing at each seeding one quart to each 15 by 15 feet or 4 bushels to the acre. Give a seeding each subsequent spring and fall of one-third the above proportions.

Qt. 45 cts., 4 qts. $1.50, 8 qts. $2.50, bus. $9.50, 10 bus. $90. Charges prepaid when cash accompanies order. Weighs 20 pounds per bushel.

"Golf Turf" contains pages of detailed information on the difficulties of producing turf under trees; also regarding the growing of grass in the Southern States. It is free, and we suggest that you write for a copy.

S. & W. Co.'s Southern Lawn Grass

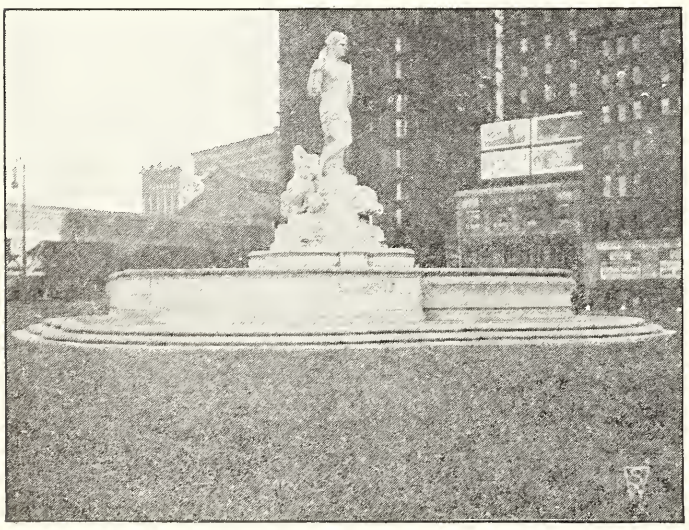


Stumpp & Walter Co.'s Terrace Sod Lawn Grass

SEASHORE LAWN SEED

The varieties of which this mixture is compounded are selected for their deep rooting qualities, resistance to salt spray, and high winds. It is recommended for those situations on the ocean front where difficulty has been experienced in getting a lawn with the usual grass seeds. The soil in the neighborhood of the sea is frequently very poor, and a very good preparation for seed is to apply Pulverized Sheep Manure at the rate of ½ to 1 pound per square yard; rake after applying this manure and then sow seed.

One or more quarts of Seashore Lawn Seed should be sown on an area 15 by 15 feet, or four bushels to the acre. **Qt. 40 cts., 4 qts. $1.25, 8 qts. $2.25, bus. $8.50, 10 bus. $80.** Charges prepaid when cash accompanies order. Weight, 22 pounds per bushel.



"Civic Virtue," the much-discussed statue in City Hall Park, New York City. A good turf resulted in a few weeks from seed sown around the base, fall, 1922.

Stumpp & Walter Co.'s **High Grade Seeds** supplied to New York Parks Department.

TERRACE SOD LAWN SEED

FOR TERRACES, HILLSIDES AND EMBANKMENTS

To Grass a Bank or Terrace. For each square rod take two quarts of lawn grass seed and mix it thoroughly with 6 cubic feet of good, dry garden loam. Place it in a tub, and add liquid manure, diluted with about two-thirds of water, so as to bring the whole to the consistency of mortar. The slope must be made perfectly smooth, and then well watered, after which the paste should be applied, and made as even and thin as possible.

A special mixture of grasses best suited for sowing on terraces and side-hills—grasses that produce strong, spreading roots, thus preventing heavy rains from washing them out, that will withstand drought and exposure, thrive on shallow soils, and at the same time produce a rich, green turf throughout the season. **Qt. 50 cts., 4 qts. $1.75, 8 qts. $3.25, bus. $12, 10 bus. $115.** Charges prepaid when cash accompanies order. Weight, 20 pounds per bushel.

Stumpp & Walter Co.'s Seashore Lawn Grass

HIGH-GRADE LAWN SEED

FOR PARKS AND OTHER LARGE AREAS

Our High Grade Grass Seed is composed of fine, recleaned grasses, care being taken to include varieties of high purity and vitality. They are carefully proportioned so that they will succeed one another and give the lawn that much-desired green, velvety appearance through the summer. One quart will sow 15 by 15 feet or four bushels to the acre; use one-half these quantities for renovating old lawns.

Our best grass seed mixture is "Staigreen," which will produce the finest possible turf. Our second quality mixture is "High Grade," and we advise its use on large areas or on lawns when low cost of materials is more important than extreme fineness of turf. **Qt. 40 cts., 4 qts. $1.25, 8 qts. $2.25, bus. $7.50, 10 bus. $70.** Charges prepaid when cash accompanies order. Weight, 22 pounds per bushel.

One of the secrets of a Good Lawn is to use the best implements for its upkeep. A Roller of the correct weight, a Mower that will cut the grass without pulling the roots, a Sprinkler which will distribute water gently and evenly. Make your selection from pages at the end of this catalogue.

How to Make A Lawn

THE production of a good lawn is not at all difficult. The method is as follows: (1) Dig the soil about 6 inches deep, but only when it is dry; if rain has fallen recently allow a few days of fine weather to elapse before commencing work. (2) As you dig, lift each clod high enough to enable you to turn it completely over. (3) Strike the inverted clod with the back of the fork to break it. (4) As the work proceeds, remove all stones, sticks, and rubbish. (5) Scatter **Stumpp & Walter Co.'s Emerald Grass Fertilizer** on the dug earth; use 1 ton per acre or 1 pound to each 25 square feet. (6) Draw a rake back and forth until the soil is smooth and in fine condition. (7) Sow **Staigreen Lawn Seed** at the minimum rate of 100 pounds per acre (4 bushels) or 1 pound (nearly 2 quarts) to each 400 square feet. Double the quantity when turf is needed quickly. Select a day when no wind is blowing; divide the seed into two portions and sow the land twice to insure its even covering; it is important to stir the contents of the bag now and again. When you have sown the seed, rake the land once more, but very lightly. Do not work the rake back and forth—merely draw it toward you in a series of light strokes, raking only once in the same place. The idea is to bury most of the grass seeds no more than ⅛ inch deep. (8) Roll the seeded area, but should rain fall before the work is completed, defer the rolling until the land has dried.

How long will the Lawn be growing? This varies with the time of year, quality of soil, rainfall, etc. Under very favorable conditions the young seedlings show through in less than ten days and the whole area looks green in a further two weeks; wait four weeks more before walking on the grass except to mow and roll it.

When is the best time to make a Lawn? Early spring and late summer are the best, but seed will usually grow quite well if sown at any time of the year.

Will the above directions hold on poor or sandy land? Before commencing work on poor soil, spread rotted horse-manure or cow-manure over the land at the rate of 20 tons to it the acre or 1 pound per square foot. Then proceed exactly as directed. If manure cannot be procured, use Pulverized Sheep Manure at the rate of 2 tons to the acre or 1 pound to each 10 square feet. Do not attempt to grow a lawn on excavated soil, subsoil, or "fill" without first applying manure, digging, then adding at least an inch of top-soil; two or three if possible. Apply Emerald Grass Fertilizer, and proceed as suggested.

How about moist, sour soil? Spread hydrated lime at the rate of 2 tons per acre or 1 pound to each 10 square feet: then follow directions. In bad cases it will be necessary first to drain the land by digging ditches or laying tile.

Should I sprinkle the new Lawn with water? Best not for the first three weeks, as it is likely to do more harm than good. Later, when the grass has started, it should be watered in dry weather: use an approved type of sprinkler and soak thoroughly every three days.

EMERALD GRASS FERTILIZER. 5 lbs. 45 cts., 10 lbs. 80 cts., 25 lbs. $1.75, 50 lbs. $3, 100 lbs. $5.50, 500 lbs. $22, ton $75

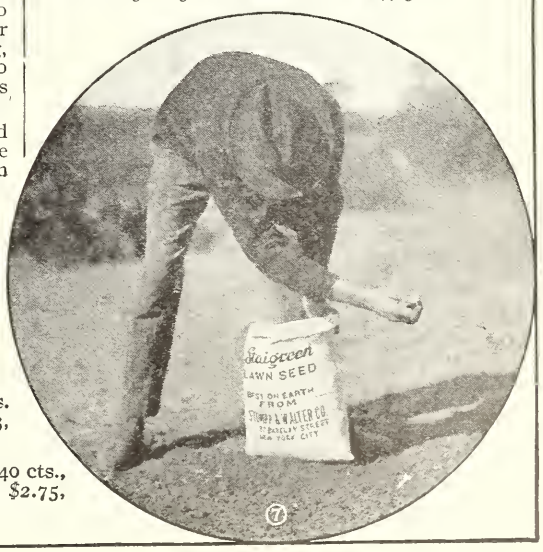
PULVERIZED SHEEP MANURE. 5 lbs. 40 cts., 10 lbs. 75 cts., 25 lbs. $1.50, 50 lbs. $2.75, 100 lbs. $5, 500 lbs. $18, ton $65.

What after-care is needed? As soon as the young grass is 2 inches high, begin cutting it and keep it regularly mown; roll it at least once a week, and water during dry weather.

How about Weeds? Stumpp & Walter Co.'s seeds are as free from weeds as care and modern machinery can make them. All soils, however, contain seeds of weeds—some more than others—and many of these start to grow along with the grass. Close cutting will kill most, but the few that remain must be taken out, and the holes filled with good soil in which you have mixed some grass seeds.

How about White Clover? We include Clover only in our lowest-priced mixture, which we call "High Grade Lawn Seed," because Clover is generally omitted nowadays in the finest lawns. For the convenience of our customers who wish it, we offer **Superfine White Clover.** Oz. 10c., ¼lb. 25c., lb. 75c., 10 lbs. $6.50, bus.(60 lbs.) $37.50, 100 lbs. $62.50. Mixed with grass seeds the usual allowance of Clover is 5 per cent.

Is "Staigreen" the best seed to use? No seeds are purer and no seeds grow more vigorously than the grass seeds in Staigreen, which is a mixture of five distinct varieties, and for the finest lawns around the residence Staigreen cannot be surpassed. For shade and special conditions use the mixtures described on the preceding pages. **Staigreen Lawn Mixture.** Lb. 60 cts., 2½ lbs. $1.40, 5 lbs. $2.75, 12½ lbs. $6.50, 25 lbs. $12, 100 lbs. $47.50.



TEN CHOICE AMERICAN ASTERS

The following ten Asters, many of which were introduced by James Vick's Sons, Aster Specialists, deserve a place in every garden, as they are among the best of recent introductions.

Autumn Glory. **New Very Late Branching Aster.** Pure sea-shell pink. While similar in color to Semple's Pink, with which most persons are familiar, it has a better and more substantial flower, a deeper and longer-keeping color, larger and stronger type of plant. Its most distinctive characteristic and chief claim for recognition, however, is the fact that it is later in season than any of the other varieties. While it cannot take the place of Semple's Pink, Peerless Pink, Shell-Pink, Rochester, and others of similar color, all of which are earlier, it supplements them by blooming after the other Late Asters are past their prime, and before the early Chrysanthemums are ready, thus prolonging the Aster season two weeks, and coming at a time when good flowers are extremely scarce. Autumn Glory will be a money-maker for the commercial grower, and a delight to the amateur. It comes uniformly true to color and type. The flowers are splendid in size and form, very double, and are borne on stems of unusual length. **Pkt. 15 cts., ¼oz. $1.25.**

Pink Enchantress. Upright in habit, as distinguished from the Branching form. The plant is very vigorous, and produces long, strong stems for the support of numerous large exhibition blooms. The flower is always full-double; petals are of medium length and very broad; those toward the center fold in very regularly, while gradually, toward the outer edge, the petals stand out more and more until those on the outside recede from the center, thus increasing the diameter of the flower, which compares very favorably in size with the largest-flowering kinds on our farm. Color similar to that of the Enchantress carnation; flowers late. **Pkt. 15 cts., ¼oz. $1.25.**

Peach Blossom. A decided and pleasing shade of deep lavender-pink. The flowers are of the largest Branching size and very deep, having an unusual number of rather narrow petals. The size and thickness of the flower give it a massive effect. The plants are of the non-lateral type, with very strong stems that hold the flowers up at all times; flowers late. **Pkt. 15 cts., ¼oz. $1.25.**

White Perfection. Finest midseason white Aster in cultivation. The flowers are 4 inches in diameter and exquisite in form, and the plants are taller than those of the late upright Asters. When first open the entire flower is whorled, producing a charming effect; the broad petals are slightly folded lengthwise, making them appear rather narrow. The plants are extremely vigorous; they carry about twelve large flowers on strong stems free from side branches. **Pkt. 15 cts., ¼oz. $1.25.**

Early Upright White. This is one of the best selling novelties of the last two seasons. Plants grow compactly with long, erect flower-stems, which are quite free from side shoots. Plants yield eight to twelve flowers. The flowers are unusually large and solid, compact and ball-shaped. The crown is completely covered. **Pkt. 15 cts., ¼oz., $1.25.**

Royal Pink. Possessing all the characteristics of our famous Late Branching, and identical in habit with Royal Purple, except in color, which is a beautiful shell-pink. Blooms several weeks earlier than the Late Branching. **Pkt. 15 cts., ¼oz. $1.25.**

Royal Purple. Considered by most people who have grown this as the best medium-early Branching Aster of its color. It has all the advantages of vigor and productiveness; color striking. **Pkt. 15 cts., ¼oz., $1.25.**

Purple American Beauty. Similar in character of flower and growth to the well-known Late Branching Asters. They differ, however, in that the flowers are borne on much longer and heavier stems. One of the latest flowering Asters. **Pkt. 15 cts., ¼oz. $1.25.**

Lavender Gem. Truly a gem and easily the finest early lavender. Full-double flower, the feathery effect of the ostrich-feathered type is enhanced by the fact that it bears long, partly tubular florets that are irregularly cut and slashed, resembling ragged chrysanthemums. **Pkt. 15 cts., ¼oz., $1.25.**

Improved Crego Pink. The plants are vigorous and productive of from ten to fifteen strong flower-stems frequently 2 feet or more in length. Pure shell-pink flowers, 4 to 5 inches; in bloom from mid-August on through September. **Pkt. 15 cts., ¼oz. $1.25.**

COLLECTION. One packet each of 10 varieties, $1

PINK ENCHANTRESS ASTER

S. & W. Co.'s Novelties and Specialties in Flower Seeds

The descriptions given of the following Novelties are those of the introducers. In this connection we desire to say that all are from the best possible sources of supply, and have been selected by us with every regard for the reliability of the introducers.

ANTIRRHINUM (Snapdragon)

This is considered one of the finest, half-hardy perennials which may be flowered from seed the first year. Plant-breeders both in Europe and America vie with one another each year in introducing new strains. They are very valuable, both as a cut-flower for home decoration or for bedding. We offer below ten choice varieties of the Giant-flowering Half-High type and six varieties of the Tall type. The Tall varieties are best seen to advantage in long borders in the flower-garden, making splendid subjects for backgrounds, while the half-high types have now superseded the others in popularity on account of their suitability for bedding. From seed sown in the open ground early in May plants may be had in bloom in July, but it is best to start the plants indoors in pots or flats or in a frame in March and transplant the seedlings outdoors as soon as weather will permit.

Giant-flowered Half-High Varieties

We offer below what we consider as being the finest of this type. The plants are of splendid constitution, the flowers large in size, and the color range covers the best distinct types. When started early and grown without check they attain a height of 1½ feet by early summer and remain in full bloom until cut down by frost.

Amber Queen. Amber, suffused chamois.
Apricot Queen. Apricot-pink, white tube.
Carmine Queen. Brilliant rose-carmine.
Daphne. Pearly pink.
Defiance. Beautiful scarlet.
Firebrand. Scarlet, yellow lip.
Fawn. Rose and gold. One of the loveliest colors. Splendid variety to use alone for bedding.
Golden Queen. Rich pure yellow.
Mont Blanc. Pure white.
Rose Dore. Rose tone, orange suffusions.

Each, pkt. 15 cts., ¼oz. 75 cts.
COLLECTION. Pkt. each of above 10 fine varieties, $1

Giant-flowered Tall Varieties

We offer six of the best distinct colors in this type, which grow to a height of 3 feet with good cultivation. Splendid for cutting.

Garnet. Garnet.
Delicata. Rose-pink.
Queen Victoria. White.
Rose. Beautiful rose-pink.
Scarlet. Bright scarlet.
Yellow. Rich golden yellow.

Each, pkt. 15 cts., ¼oz. 75 cts.
COLLECTION. Pkt. each of above 6 distinct colors, 50 cts.

ASTER, AMERICAN BEAUTY

Similar in type and growth to our well-known late branching Asters, but differs in that all the large blossoms are produced on longer and heavier stems. Some of the individual stems measure more than 2 feet in length. It makes an unusually heavy growth and is one of the latest flowering Asters we know of. We can supply in the following four colors:

Peach Blossom **Light Blue** **Rose** **Purple**

Each, pkt. 25 cts., 5 pkts. $1

NEW DOUBLE COSMOS

Some years ago, when we first offered in our Novelties and Specialties this splendid new form of Cosmos of Australian origin, we considered it a notable addition to this beautiful family of easily-grown annuals for cutting. We are pleased to announce, however, that, due to painstaking effort on the part of an American grower, this strain has been further improved upon, in size of flower, greater degree of doubleness, and general vigor of the plant. Many of the flowers are entirely double, while others have an attractive collar which rather adds, we think, to its beauty. **We offer three distinct colors, as well as a mixture of all three.**

Double Pink. Beautiful rose-pink.
Double White. Pure glistening white.
Double Crimson. Rich rose-crimson.
Double Mixed. Mixture of all three.

Each, pkt. 20 cts., 6 pkts. $1

CARDINAL CLIMBER

(*Ipomœa Quamoclit hybrida*)

A rapid grower, often attaining the height of 30 feet or more. The deeply laciniated, fern-like foliage and fiery cardinal-red flowers are borne in profusion from July to frost. The flowers are about 1½ inches in diameter and are borne in clusters of five to seven blooms. Seed may be sown indoors during April, or outdoors in May. Soaking seeds in warm water before planting hastens germination. **Pkt. 15 cts., 2 pkts. 25 cts.**

NEW DOUBLE CLARKIAS

This is a distinct advance in the Clarkias, which has resulted from careful selection of the tall-growing varieties. Plants grow about 2 feet high, which makes them good subjects for pots or open-ground culture. A grand acquisition to the hardy annual section.

Purple King. Rich purple.
Brilliant King. Crimson-scarlet.
Scarlet King. Orange-scarlet.
White King. Pure white.

Each, pkt. 15 cts., 4 pkts., one of each, 50 cts.

CENTAUREA AMERICANA

A variety of the Giant Cornflower which only of recent years has been generally seen in the American garden. The stems and foliage are gigantic in size compared with the regular sorts. The flowers attain the size of 4 inches, are of a splendid, deep lavender-color, making an excellent subject for garden decoration or cuttings. Easily flowered from seed sown outdoors; plants should be 1 foot apart. Height 3 ft. **Pkt. 15 cts., 5 pkts. 50 cts.**

Double Cosmos

CHINESE WOOLFLOWER (Celosia Childsii)

This is a unique form of the feathered Coxcomb, growing 2 to 3 feet high and about the same size in diameter. Each branch is terminated with a large head of rich crimson flowers that look as if made out of some silky wool material. A very effective annual for beds and borders. May be used to excellent advantage as a cut-flower as well.

Crimson. Very rich color. | **Pink.** Salmony pink.

Each, pkt. 15 cts., 2 pkts. 25 cts.

NEW HYBRID DELPHINIUMS

Hardy Larkspurs

The magnificent Hybrid Hardy Larkspurs offered below represent the finest varieties of a famous English collection, many of which, up to the present time, have reached the gardener only in plant form. Through special efforts we have induced England's best specialists to carefully save seed for us, and we offer a fair quantity of seed of each variety. It is a well-known fact that seed saved from these varieties can never be relied upon to come strictly true to name. We have no hesitancy in saying, however, that due to care taken in gathering seed the plants produced will give flowers equal in merit as regards size and color to those from which seeds were saved.

Amos Perry. Rosy mauve; semi-double.
Andrew Carnegie. Enormous, double flowers; soft lilac, with blue center.
Beauty of Langport. Creamy white, with pale buff eye.
Chamud. Very dark violet; double-flowering.
Corry. Sky-blue, with rosy tinge; double-flowering.
King of Delphiniums. A magnificent variety, with massive spikes well set with semi-double flowers, 2 inches or more across. In color a rich gentian-blue, with a very conspicuous white center. A very showy variety for the border.
Lady Ravensworth. Lovely bright blue.
Prince Henry. Semi-double; rich, dark purple, with white center. A very fine sort.
Rosenlust. Light blue, shaded rose.
Zuster Lugten. Rich, dark blue; double.

Any of the above, pkt. 25 cts., 5 pkts. $1

COLLECTION, 1 pkt. each of above 10 varieties $2 00

Dianthus, Snowball

Didiscus cærulea

DIANTHUS, SNOWBALL

This splendid variety of the Dianthus or Pink family is one of the finest of all this genus for cutting. It is classed as a biennial but may be treated as an annual and sown outdoors when all danger of frost is past. It requires a rich soil and an abundance of sunshine. The plants grow about a foot high and are excellent for beds or border. Large, double, white flowers. **Pkt. 15 cts., ¼oz. 50 cts.**

DIASCIA BARBERÆ

An old and not so frequently grown annual which we have inserted here in the Specialties in an endeavor to give it a wider acquaintance with flower-lovers. The plants average 9 to 12 inches in height and the dainty spurred flowers are freely produced in sprays on wiry stems. The flowers are ⅞ inch in diameter and of a soft salmon-rose. **Pkt. 25 cts., 5 pkts. $1.**

DIDISCUS CÆRULEA

Queen Anne's Lace Flower

This pretty annual, which was cultivated extensively in the gardens of our grandparents, has been brought to prominence again. Florist shops throughout the country now display it, and its lovely, refined appearance and color makes an instant appeal. Few flowers are as lovely for decorating the dinner table. Queen Anne's Lace Flower grows into an upright, very much-branched plant about 2 feet high. Each branch ends in an umbel of sky-blue flowers, which spread out in an umbrella-like fashion, crowning each shoot with a beautiful and delicate head of flowers. Each individual bloom in the umbel is carried on a thin and long tube, giving the flower-heads a distinct and refined appearance. The name Queen Anne's Lace Flower is most appropriately applied to the flowers since the graceful form of the umbels of bloom resemble in their quaint and artistic arrangement, the most delicate and dainty lace. It is easily grown and a splendid cut-flower, lasting unusually long in water. Seed may be sown outdoors in a wall-prepared seed-bed when trees are out in leaf; water copiously during hot weather.

Pkt. 25 cts., 5 pkts. $1

GAILLARDIA LORENZIANA, THE BRIDE

The annual Gaillardias have always been very popular, more especially the double Lorenziana, and we feel that the variety that we now offer as "The Bride" will be much sought after. The flower is white, very double, and borne on very long stalks, making it an ideal plant either for bedding or cut-blooms. **Pkt. 15 cts., 2 pkts. 25 cts.**

NEW GODETIAS

We are pleased to offer **five** new varieties of this charming annual of easy culture. The plants are very double in form, of distinct and graceful habit, and are very lovely for cutting, as the flowers develop and the sprays lengthen after being placed in water. Excellent border plant attaining height of 2 to 3 feet.

Tall Double Pink
Tall Double Rose
Tall Double Carmine
Tall Double Crimson
Tall Double Mauve

Each, pkt. 25 cts., 5 pkts. $1

HUNNEMANNIA FUMARIÆFOLIA

Santa Barbara Poppy, or Bush Eschscholtzia

This is by far the best of the Poppy family for cutting, remaining in good condition for several days. Seed sown early in May will, by the middle of July, produce plants covered with their large, buttercup-yellow, Poppy-like blossoms, and never be out of flower until hard frost. The plants grow about 2 feet high, are quite bushy, with beautiful, feathery, glaucous foliage. **Pkt. 10 cts., ¼oz. 50 cts., oz. $1.50.**

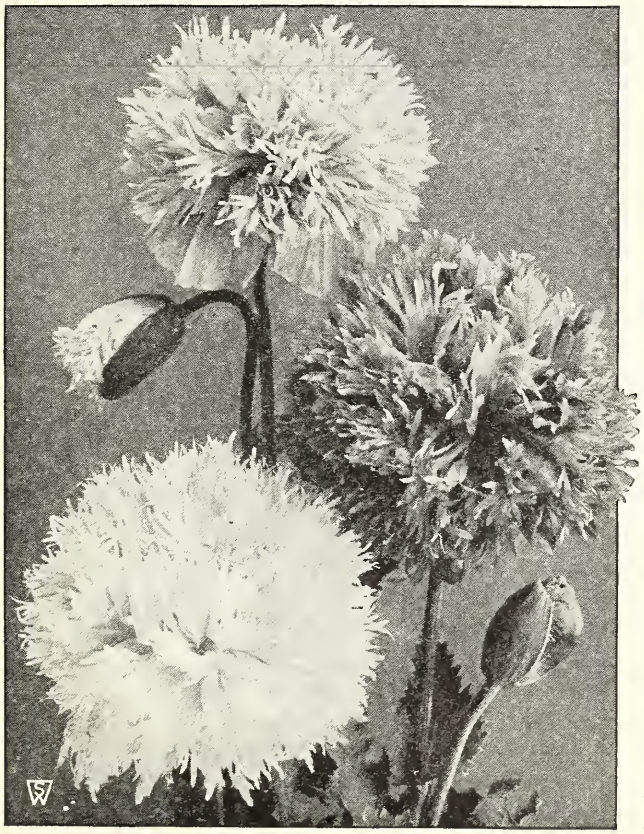
NASTURTIUM, NEW GIANT-FLOWERING

The plants are strong and vigorous, with very large, bright green leaves, measuring from 5 to 8 inches across. The flowers, which are very numerous, measure 3 inches in diameter, and are borne on long stems well above the foliage. They are exquisitely formed, with overlapping, crinkled petals. They are produced in great numbers and have a most striking effect. Their fine color, long stems, great size and esthetic form make them valuable for cutting.

Giant-flowered, Dwarf, Mixed. Pkt. 15 cts., oz. 25 cts., ¼lb. 75 cts., lb. $2.

Giant-flowered, Tall, Mixed. Pkt. 15 cts., oz. 25 cts., ¼lb. 75 cts., lb. $2.

Balcony Petunias



Double Carnation-flowered Poppies

THREE BALCONY PETUNIAS

These three varieties, which we have offered here this year in order to give them wider prominence, are a select type of the plain-edged Petunia which by reason of the habit of the plant is well adapted for window-box culture. The plants are symmetrically formed, grow about 1 foot high, and the flowers are rich and pure, measuring 3 inches across. We offer them in three distinct colors:

Balcony Blue. Rich indigo-blue. **Balcony Rose.** Rose-pink. **Balcony White.**

Each, pkt. 25 cts., 5 pkts. $1

PETUNIA, S. & W. CO.'S PINK BEAUTY

This is a grand acquisition to the single bedding Petunias. Brilliant rose-pink, throat lightly suffused yellow. The flowers are very large and of handsome form. Of very rapid growth and continuously in bloom. Many who have grown this Petunia in beds, borders or rockeries proclaim it the best they have ever seen. **Pkt. 15 cts., $\frac{1}{16}$oz. $1.**

POPPY, Double Queen

This beautiful new strain of Poppies is of the Shirley type, but the flowers are double and semi-double, of the most delicate and brilliant colors, including salmon, pink, crimson, orange-salmon shaded white, brilliant scarlet with white center. For graceful beauty these Poppies are unexcelled and will be highly prized for the flower-garden and cutting. Like all of the annual Poppies this variety should be sown early in the spring, barely covering the seed, in a sunny situation, and for best results thin out to 4 inches between the plants. It is well to make several sowings where a succession of bloom is desired. **Pkt. 15 cts., ¼oz. $2.50.**

Poppy, Double Carnation-flowered

Resembles the annual Poppy, but larger and more double in form. The colors are similar to those described above but the flowers are more double. They are very showy during their flowering period. Excellent for borders or beds. **Pkt. 10 cts., ¼oz. $1.**

GIANT POLYANTHUS

The visitor to any of the famous gardens of England in Maytime is greatly impressed with the manner in which this beautiful Primrose is used and the gorgeous display the better varieties present. Many of the better gardens use them to intersperse between May-flowering Tulips in their bulb-gardens, but they are best seen to advantage in borders or in beds. The strain we are offering is of strong sturdy habit, and bears immense trusses of large flowers on strong stems 10 inches in length. The colors vary from pure white to rich wallflower-red. Seed is usually sown in early summer, in a frame, and the plants transplanted to the garden in the autumn. They require slight protection over winter. **Pkt. 25 cts., 5 pkts. $1.**

NEW SALVIAS

We have several varieties of New and Rare Salvias to offer below, and would ask our patrons to give them a trial.

America, or Globe of Fire. A new variety of this popular flower. The bushy plants do not grow over 15 inches high, with the large spikes of brilliant scarlet flowers thrown well above the plant, making a total height of about 2 feet. If desired for borders or beds, this is indeed an acquisition on account of its uniformity of height. A continuous bloomer. **Pkt. 25 cts., ⅛oz. $1, ¼oz. $1.75.**

Ostrich-Plume. The Ostrich-Plume Salvia is the most beautiful of all Salvias of recent introduction. The habit of the bush resembles the Splendens type but, unlike Splendens, produces a plume. The bush is well covered with these plumes of the most intense, dazzling scarlet. As a cut-flower for vases one plume alone makes a delightful decoration. Comes 75 per cent true from seed, and stands the weather as well as all the other Salvias. **Pkt. 25 cts., 5 pkts. $1.**

The increasing interest of garden lovers in the modern Dahlias has given Dahlia breeders greater enthusiasm—better forms are being introduced each year. Our Catalogue contains a list of many of the best varieties.

New Double Hybrid Pyrethrum

Sweet William, Newport Pink

PYRETHRUM, S. & W. CO.'S NEW DOUBLE HYBRIDS

This beautiful perennial, when grown from a selected strain, is one of the finest for cutting. The seed we are offering is grown by a specialist who, after painstaking effort, has produced a wonderful strain. The flowers are large, very double, and the colors are distinct shades of pink, salmon, scarlet and pure white. **Pkt. 25 cts., 5 pkts. $1.**

TWO SPLENDID SWEET WILLIAMS

We are offering in the specialties section of our catalogue two really worth-while Sweet Williams. They have been grown in many American gardens for years, but we feel that their value should be brought more prominently to the attention of garden-lovers. Seed of this pretty hardy perennial should be sown in a frame during late spring and transplanted to the garden in early autumn, so that they become well established before winter.

Scarlet Beauty. An intensely rich, deep scarlet, very vivid, and quite an improvement over other listed varieties of its color.

Newport Pink. A beautiful even shade of watermelon-pink or salmon-rose. The flowers are borne in massive heads, on stems 1½ feet high. For midseason bedding it is very effective.

Each, pkt. 15 cts., 2 pkts. 25 cts.

VERBENA HYBRIDA, LUCIFER

We consider this the finest Verbena introduced to date. The flowers are of large size and of a brilliant scarlet with no eye. We suggest our patrons trying this splendid variety this year. **Pkt. 25 cts., 5 pkts. $1.**

Double Dahlia-flowered Zinnia

NEW ZINNIAS

We offer on pages 116 and 118 all the types of Zinnias listed by us, but have taken occasion to illustrate in our Novelty Section several new types which our California growers have developed in recent years.

New Double Dahlia-flowered

We are pleased to say that we have been able to secure this Zinnia in separate colors this year. The plants are of the same vigorous habit as our Giant Double-flowering varieties listed in the color illustration on page 116. They attain the height of 3 feet, producing mammoth flowers averaging 6 inches across by 3 to 4 inches in depth, similar in shape to the decorative dahlia. We consider them a fitting companion to our strain of Giant Double-flowering Zinnias.

Canary Bird. Primrose.
Crimson Monarch. Largest of the red shades.
Exquisite. Light rose, center deep rose.
Golden State. Rich orange-yellow.
Meteor. Deep glowing red.
Polar Star. Large, pure white.
Old Rose. Beautiful shades of old rose.
Mixed. A mixture of all shades.

Each, pkt. 25 cts., 5 pkts. $1

COLLECTION: One pkt. each of above 7 varieties.....$1.25

New Zinnia, Picotee

The flowers of this new type of Zinnias are not as large as those of the Giant Double varieties but are very effective in appearance. The petals are all well marked with a color distinct from that of the body of the flower. Plants attain a height of 1½ feet. We offer them in a splendid mixture of colors. **Pkt. 25 cts., 5 pkts. $1.**

New Zinnia, Victory Quilled

This new type of Zinnias has petals similar in form to the cactus dahlia. The petals have a rather refined looking appearance and are very graceful. Plants attain a height of 1½ feet. We offer them in a good mixture of colors. **Pkt. 25 cts., 5 pkts. $1.**

The Gladiolus as a summer-flowering bulbous plant has become increasingly popular of recent years. Our catalogue contains a select list of many of the best modern varieties.

New Zinnia, Picotee

Fifteen Fine Exhibition Sweet Peas

Each year the Sweet Pea enthusiasts of Europe and America offer a list of Novelty Sweet Peas. There are now several hundred good varieties in commerce, many of them of splendid merit, but in many cases the varieties are much alike. We have listed on pages 112 and 113 of our catalogue 55 of the most distinct varieties which we respectfully recommend. Many of our customers, however, are desirous of growing a limited number of varieties but want these to be the very best. It is with this in mind that we offer the following:

	Pkt.	Oz.
Brocade. Considered the finest variety in the art shades. A combination of salmon, rosy lavender, and rose-pink, with a satiny finish. The flowers are large and exquisitely shaped, carried on strong stems	$0 15	$0 75
Charity. This is, without a doubt, the finest rich brilliant crimson which does not burn in the sun. A vigorous grower, the exquisitely waved flowers are usually produced in fours on long, graceful stems.	15	75
Dobbie's Cream. Deep cream. Still a winner at all Sweet Pea exhibitions on account of its splendid size and long stems. Where a good primrose variety is desired, we suggest this one	10	50

Royal Purple Sweet Peas

	Pkt.	Oz.
Hawlmark Lavender. Without a doubt the finest pure lavender as yet introduced. The flowers are of the largest size	$0 25	$1 00
Hawlmark Maroon. A rich maroon-red; the flowers have a glistening sheen resembling polished mahogany. A splendid grower, producing many four-flowered sprays on very long stems	25	1 00
Hawlmark Pink. This might easily be considered the finest introduction in recent years. The color is a most beautiful shade of rich rose-pink, deeply flushed and shaded with salmon. The flowers are freely borne on many four-flowered sprays	25	1 00
King White. Still holds the fort as being the finest pure glistening white	10	50
Mavis. A very charming shade of soft, yet rich, rose-pink on a white ground. One of the really good varieties of recent introduction	10	50
Mrs. C. P. Tomlin. This is now considered the leader among the rich crimson-scarlets; remarkable for its purity of tone and substance. The color is scarlet with a touch of fiery red in it. The flowers are of largest size, producing many four-flowered sprays	15	75
Mrs. Tom Jones. Until the introduction of this beautiful variety there was no color like it in blues. The flowers are large, of great substance, exquisitely waved, and of a uniform bright delphinium-blue. A leader at all Sweet Pea exhibitions in its color	15	75
Picture. Considered the largest Sweet Pea introduced to date and of unusual substance. The color is a blend of cream and pink shades quite different from the usual cream-pink varieties, the color being flushed deeper in the wings, and the pink shade being brought out by the creamy flush in the center of the standard	25	1 00
Royal Purple. Without a doubt this is the finest rich royal purple. A large-flowering variety, with many four-flowered sprays.	10	50
Royal Scot. Considered one of the few of the really good novelties of recent introduction. A true scarlet self, the finest in its class; a very brilliant self color	15	75
Sparkler. A wonderful exhibition variety of recent introduction. The color is a lovely combination of rose and cream, the standard being a bright rose, the wings a creamy primrose lightly suffused soft rose.	15	60
Tangerine. This variety has been appropriately named; a deep orange, almost approaching the colors of the tangerine orange. Flowers of great size and well waved	15	75

COLLECTION: One pkt. each of above 15 fine Exhibition varieties $2

GENERAL LIST OF FLOWER SEEDS

In presenting this list of **Flower Seeds** for your attention, every care has been taken to secure **seeds** from sources of supply known to us, and from our experiences and from our tests at our **trial grounds,** to be of the highest possible merit. Our Flower Seeds are selected with an idea of superiority of strain and we handle only the highest possible types in each respective class.

We mail all Flower Seeds FREE OF COST to any Post Office in the United States.

ABUTILON

(Chinese Bellflower, Flowering Maple)

Finest Mixed. Attractive coolhouse shrub and window-plant. Perpetual-blooming, bearing lovely bell-shaped flowers; valuable for winter decoration and summer bedding. Height 4 feet. Pkt. 25 cts., $\frac{1}{32}$oz. $1.

ABRONIA

Verbena-like plants, very fragrant, especially toward evening. Charming trailers for vases, rockwork, etc. Half-hardy annuals. Pkt.

Umbellatum. Rosy pink. Height ¾ft.....$0 10

ACHILLEA

Ptarmica, The Pearl (Sneezewort). Hardy perennial. One of the best, bears a profusion of small, double, white flowers during the entire season. Fine for cutting. Height 2½ feet. Pkt. 25 cts., ⅛oz. $2.

ACONITUM (Monkshood, or Wolfsbane)

Napellus. A hardy perennial, growing in any good garden soil, producing long spikes of curiously shaped blue flowers. Well adapted for planting among shrubbery. Height 3 to 5 feet. Pkt. 10 cts., ¼oz. 35 cts.

Finest Mixed. All colors. Pkt. 10 cts., ¼oz. 25 cts.

ACROCLINIUM. See page 119.

ADLUMIA (Mountain Fringe)

Cirrhosa. A very graceful, hardy, biennial climber. The foliage is somewhat similar to that of maidenhair fern. The flowers are tube-shaped, white or purplish, resembling in form the bleeding-heart and entirely cover the plant. Excellent for trellises or old stumps of trees. Flowers first season from seed, if sown early. Pkt. 15 cts., 2 pkts. 25 cts.

ADONIS

	Pkt.	¼oz.
Æstivalis (Pheasant's Eye). Hardy annual. Dark green foliage; scarlet flowers. Height 1 foot. June to August	$0 10	$0 25
Autumnalis (Flos Adonis). Small, crimson flowers, with dark center; globose. Height 1 foot. May to July.	10	25
Vernalis (Spring Adonis). Hardy perennial, with large yellow flowers in the early spring. Height 1 foot. May.	10	50

AGATHAEA (Blue Daisy)

Cœlestis. A tender perennial, with beautiful blue flowers. Fine pot plant for winter blooming in conservatories. Height 1 foot. Pkt. 15 cts., 2 pkts. 25 cts.

AGERATUM (Floss Flower)

One of the very best bedding plants, being literally a sheet of bloom from early summer till frost. Unlike many bedding plants, their flowers are not liable to be spoiled by rain, nor do the colors fade out. Easily raised from seed, which is usually started in a hotbed or window and transferred to the open ground in May. Can also be sown outdoors in May.

Blue Perfection. Large heads of deep blue flowers produced in abundance. Fine for cutting. Pkt. 10 cts., ¼oz. 50 cts.

Little Blue Star. A very dwarf variety used largely for edging, growing about 4 to 5 inches high; bright blue flowers. Pkt. 25 cts., 5 pkts. $1.

Little Dorrit, Blue. This variety grows about 6 inches high; flowers bright blue. Pkt. 10 cts., ¼oz. 50 cts.

Little Dorrit, White. Same in habit as preceding, only white. Pkt. 10 cts., ¼oz. 50 cts.

Mexicanum Capella. Distinct variety growing about 9 inches high; flowers rosy chamois. Pkt. 15 cts., 2 pkts. 25 cts.

Ageratum

AGROSTEMMA

Coronaria (Rose Campion; Mullein Pink). Hardy perennial. Flowers dark blood-red and very large; foliage silvery. Height 2 feet. June to September. Pkt. 10 cts., ¼oz. 50 cts.

Coronaria alba. White. Pkt. 10 cts., ¼oz. 50 cts.

Coronaria, Mixed. Pkt. 10 cts., ¼oz. 50 cts.

ALYSSUM

This most popular hardy annual needs little introduction. Used extensively as a border for the flower-garden, but equally valuable as a cut-flower, owing to its delightful fragrance.

Little Gem (*A. maritimum*). Plants grow only 3 to 4 inches high, and each plant completely covers a circular space of 12 to 20 inches. Pkt. 10 cts., oz. 75 cts.

Sweet Alyssum (*A. Benthami*). The well-known fragrant white variety. Pkt. 10 cts., oz. 50 cts.

White Carpet (*A. compactum procumbens*). Pure white; grows only 2 to 3 inches high and flowers profusely. Pkt. 10 cts., oz. $1.

Saxatile compactum. Hardy perennial. Excellent rock or border plant, bearing bright yellow flowers from April to June. Height 9 inches. Pkt. 15 cts., oz. $1.50.

AMARANTUS

Brilliant-foliaged annuals, growing from 3 to 5 feet high, some of the varieties bearing curious racemes of flowers. All are useful in borders of tall plants, or for the centers of large beds. They thrive best in a hot, sunny location and not too rich soil; must be given sufficient room to develop their full beauty.

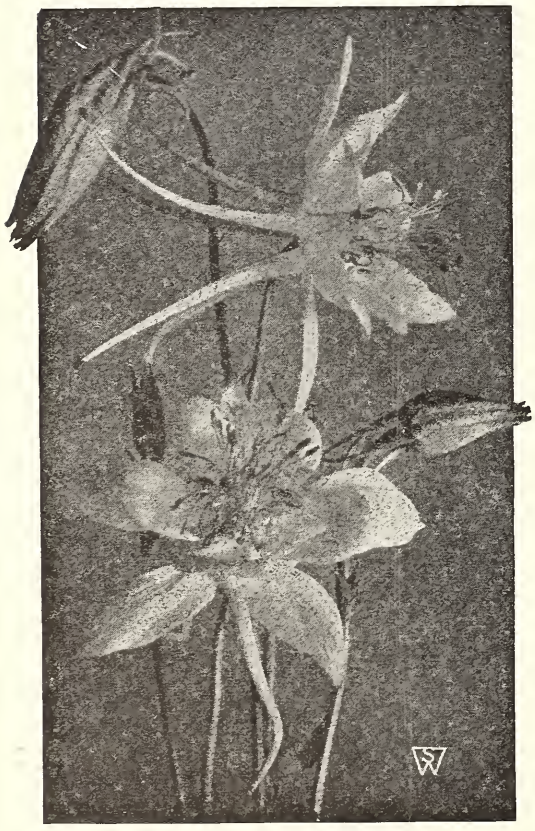
Caudatus (Love-Lies-Bleeding). Blood-red; drooping. Pkt. 10 cts.

Cruentus (Prince's Feather). Dark red, feathery flowers. Pkt. 10 cts.

Sunrise. Considered the most brilliant of this family. The foliage is a bronzy crimson, each branch terminating with a tuft of bright scarlet-carmine leaves. Pkt. 15 cts., 2 pkts. 25 cts.

Tricolor (Joseph's Coat). The leaves are red, yellow, and green. Pkt. 10 cts.

Border of Alyssum, Little Gem



Long-spurred Aquilegias

ANCHUSA

Capensis. Biennial. Flowers azure-blue. 1½ feet. July and August. Pkt. 10c., ¼oz. 50c.

Italica, Dropmore Variety. A hardy perennial whose bright blue, forget-me-not-like flowers are borne on graceful stems during the entire season and late into the fall. It is a great improvement over the existing varieties. 4 to 5 feet. Pkt. 15 cts., ¼oz. $1.

ANEMONE

Single Giant de Caen (Windflower). Half-hardy perennial. The giant French Anemone. Excellent for cutting. 9 inches. Pkt. 10 cts., ¼oz. 50 cts.

St. Brigid (Irish Anemone). A great variety of colors. Pkt. 15 cts., ¼oz. $2.

ANTHEMIS

Kelwayi (Marguerite). Hardy perennial. Large, daisy-like yellow flowers; good for cutting. Height 2 feet. July to September. Pkt. 10 cts., ¼oz. 60 cts.

Nobilis. White. 2 feet. Pkt. 10 cts., ¼oz. 75 cts.

AQUILEGIA (Columbine)

The Aquilegias are fine, free-flowering, hardy border plants. Seed may be planted in the open ground early in the spring, and will, in the case of single varieties, bloom the same season. Best results are obtained by planting in August, when they will come up early in the spring, making vigorous plants, blooming during late spring and early summer.

Giant Long-spurred, Mixed. A very excellent mixture of Columbines, comprising new and pleasing shades and combinations, effective and striking in the individual flowers, in many shades of lavender, blue, mauve, white, yellow, orange, scarlet, and bright rose-pink. **Pkt. 25c., 5 pkts. $1.**

Californica hybrida. Beautiful flowers, principally yellow and orange shades. Pkt. 15 cts., ¼oz. $1.25.

Chrysantha. Canary-yellow. About 3 feet. Pkt. 10 cts., ¼oz. $1.25.

Cærulea. Violet-blue and white. About 2 feet. Pkt. 15 cts., ¼oz. $2.

Skinneri. True scarlet tipped with green. 3 feet. Pkt. 15 cts., ¼oz. $2.

Rose Queen. Rose shades with white centers and yellow anther; beautiful. 3 feet. Pkt. 15 cts., ¼oz. $2.

Stuartii. Beautiful, large; pale blue. 2 feet. Pkt. 50 cts.

Double Mixed. Very fine. 3 feet. Pkt. 10 cts., ¼oz. $1.

Single Mixed. Fine varieties. 3 feet. Pkt. 10 cts., ¼oz. $1.

SWEET SULTANS (*Centaurea imperialis*)

WHEN we contemplated issuing the 25th Anniversary Edition of our catalogue, it was our thought to change our policy of illustrating, from time to time, some easily-grown annual flower on the first cover, and to incorporate, in the body of our catalogue, some of the color illustrations we had previously used on our covers. Sweet Sultans (*Centaurea imperialis*) were first illustrated by us on our 1916 cover. We are submitting it again to the consideration of our worthy patrons as a pleasing and splendid cut-flower for the home. We feel that the colors represented are as near to the actual color of the flowers as it is possible to reproduce them. The flowers are deliciously sweet-scented, are borne on long, strong stems, and are particularly striking, lasting several days after cutting. In the latitude of New York it is advisable to make early sowing so that the plants perfect their flowers before the hot weather sets in. We offer a collection of six varieties, including the Yellow Sweet Sultan known as *Centaurea suaveolens* which is a bright yellow and very fragrant.

White	Lilac
Pink	Purple
Rose	Yellow

Each, pkt. 15 cts., ¼oz. 50 cts., oz. $1.50

COLLECTION OFFER

One pkt. each of above 6 colors, 50c.

¼oz. each of above 6 colors, $2.50.

The Six Kings of the Aster Family

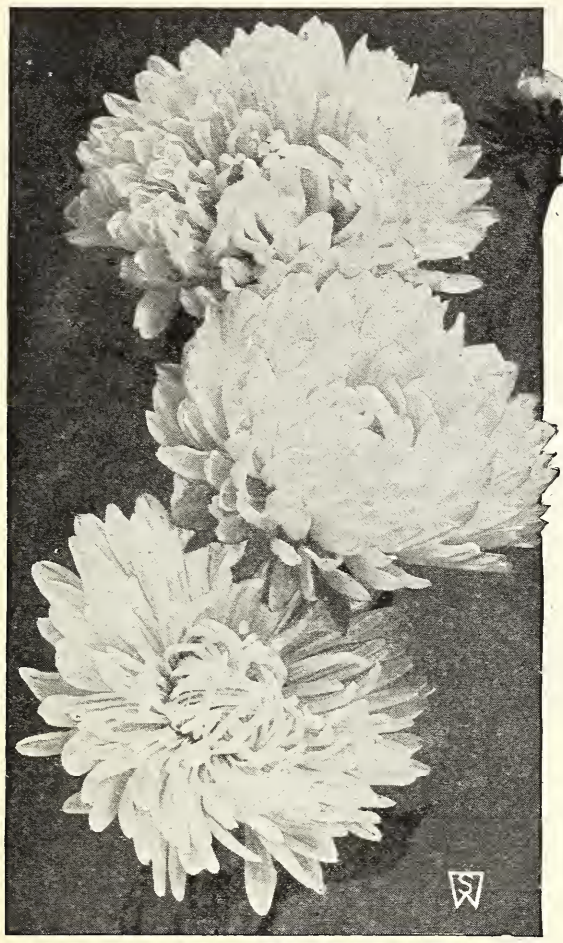
THIS magnificent class of Asters is distinct from all others in the character of the flowers. The long, narrow petals are folded lengthwise, appearing almost as though quilled. The flowers are of great size and substance and last longer when cut than any other class. Their season for blooming is just after the earliest varieties and before the late branching types. To insure earliest blooming, the seed should be started in the house, hotbed, or coldframe in April, transferring the plants to their flowering quarters as soon as danger of frost is past. For August and later blooming, sow seed outdoors in May, preferably in a well-prepared seedbed, transplanting the plants when 2 to 3 inches high to where they are to bloom. Seed may, however, be sown where it is to bloom with equally good results. *The main points are—good garden soil, well enriched* with bone fertilizer when prepared, open sunny situation, plants set 1 foot apart and 2 feet between rows, application of a mixture of even quantities of lime and wood ashes to arrest disease, frequent cultivation to insure rapid development of the plants without check.

Lavender King	**White King**
Pink King	**Rose King**
Violet King	**Crimson King**

Each, pkt. 15 cts., ¼oz. $1.25

COLLECTION

Pkt. each of above 6 King Asters, 75 cts. ¼oz. each of above 6 King Asters, $5.



S. & W. Co.'s Queen of the Market Strain Asters

S. & W. CO.'S SUPERB ASTERS

Asters will thrive in any good soil, prepared in the same way as you would for a crop of vegetables, but it is well to remember that any extra care taken in the preparation of the soil is repaid by finer plants, larger blooms, with longer stems and more profuse flowering. They should have an open, sunny position, and prefer a good, heavy, loamy soil enriched with a liberal quantity of Bone Dust No. 2, and an addition of air-slaked lime, and we do not advise growing them on the same ground two years in succession; it is better to change each season. For early flowering, seeds should be started in a sunny window, hotbed or coldframe in April and transferred to their place in the garden as soon as danger of frost has gone by. For August (midseason) and September (late) sow seeds outside in finely prepared ground in May, thinning out to 1 foot in the rows and 2 feet between. With the above prescribed treatment and frequent cultivation of plants to insure a steady growth until flowering, excellent large blooms with long stems can be obtained.

Queen of the Market Aster

(EARLY)

	Pkt.	¼oz.	Oz.
Extra-Early White	$0 10	$0 50	$1 50
" " **Crimson**	10	50	1 50
" " **Flesh-Pink**	10	50	1 50
" " **Rose**	10	50	1 50
" " **Dark Blue**	10	50	1 50
" " **Light Blue**	10	50	1 50
" " **Finest Mixed**	10	40	1 40

COLLECTION: Packet each, 6 varieties $0 50

Ostrich-Feather Aster

(MIDSEASON)

This splendid Ostrich-feather Aster comes to bloom after Queen of the Market. The plants grow tall and branching, bearing flowers of mammoth size on exceedingly heavy, long stems. Many stems have measured 18 to 24 inches in length. The flowers are large, frequently measuring 6 to 8 inches in diameter.

	Pkt.	¼oz.		Pkt.	¼oz.
White	$0 15	$1 00	**Rose**	$0 15	$1 00
Dark Blue	15	1 00	**Crimson**	15	1 00
Syringa-Blue. Beautiful blue	15	1 00	**Mixed**	10	75

COLLECTION: Packet each, 5 varieties $0 60

S. & W. Co.'s Late Branching Aster

(LATE)

This exceptionally fine Aster is without a rival. It is as well known in Europe as in America, and although we placed it on the market only a few years ago, today every florist has a fine stock of the flowers in his window just before the chrysanthemum comes in; and it is often mistaken for the chrysanthemum, which it so much resembles. The flowers are of extraordinary size—much larger than other varieties—and stand erect on long, graceful stems, well above the foliage; flower-stems 15 to 20 inches long. Grand for cutting. Plants extra large and of strong growth; one plant will cover a space 2½ feet square. By far the most satisfactory Aster grown.

	Pkt.	¼oz.
Pure White	$0 10	$0 50
Rose-Pink	10	50
Purple	10	50
Shell-Pink	10	50
Lavender	10	50
Crimson	10	50
Mixed	10	40

Any of the above, $1.50 per oz.

COLLECTION: Packet each, 6 varieties..... $0 50

Giant Victoria Aster

A flat, solid, deep flower produced in masses on a compact, fairly dwarf plant, good for pots.

	Pkt.	¼oz.		Pkt.	¼oz.
White	$0 15	$1 00	**Light Blue**	$0 15	$1 00
Rose	15	1 00	**Dark Blue.**	15	1 00
Crimson	15	1 00	**Choice Mixed**	10	75

S. & W. Co.'s Late Branching Aster

ASTERMUMS

A splendid new race of American-raised Asters, selected from the Comet Type. The plants are of upright growth, frequently having twelve to fifteen strong, sturdy stems 1½ to 2 feet long, each carrying enormous flowers of splendid form, the petals completely covering the center so as to give the impression of one of the large Japanese chrysanthemums. This Aster has been grown with excellent success this past season.

	Pkt.	¼oz.
Snow-White	$0 15	$1 00
Rose-Pink	15	1 00
Lavender	15	1 00

COLLECTION: One pkt. each of above 3 varieties, 35 cts.

Giant Comet Asters

Flowers of immense size, often 6 inches across, composed of long, wavy, twisted petals, gracefully formed into loose, yet densely double half-globes. Each plant bears fifteen to twenty flowers on very long stems, making them especially valuable for cutting.

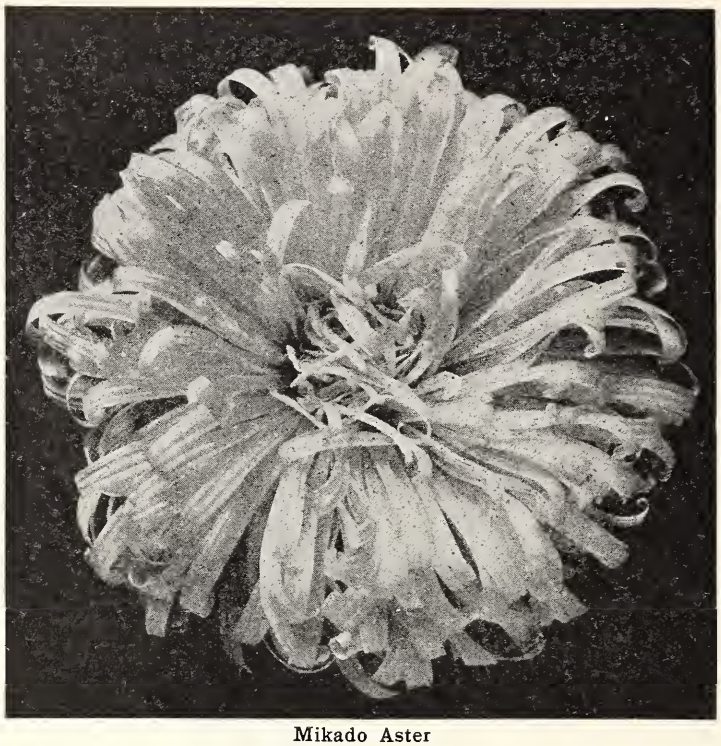
	Pkt.	¼oz.		Pkt.	¼oz.
Snow-White	$0 15	$1 00	**Dark Blue**	$0 15	$1 00
Rose	15	1 00	**Crimson**	15	1 00
Light Blue	15	1 00	**Shell-Pink**	15	1 00
			Mixed	10	1 00

COLLECTION: One pkt. each of above 6 varieties, 75 cts.

Giant Crego Asters

A flower of the Giant Comet type, often measuring from 4 to 5 inches in diameter and resembling large chrysanthemums. They are of strong growth, attaining the height of 3 feet.

	Pkt.	¼oz.		Pkt.	¼oz
White	$0 15	$1 00	**Lavender**	$0 15	$1 00
Rose	15	1 00	**Crimson**	15	1 00
Light Pink	15	1 00	**Mixed**	10	1 00



Mikado Aster

Daybreak

Of symmetrical growth and habit; attains a height of 1½ feet and produces, during August, in the greatest profusion, perfect globe-shaped, double flowers, which are of a delicate pink tint. **Pkt. 15 cts., ¼oz. $1.**

Astermum

Single Comet Asters

This type of Asters has met with considerable demand recently. From a decorative point of view the possibilities are immense. Their large blooms, often measuring 5 to 6 inches across, make them truly conspicuous.

	Pkt.	¼oz.
White	$0 15	$1 00
Light Rose	15	1 00
Scarlet	15	1 00
Light Blue	15	1 00
Dark Blue	15	1 00
Mixed	10	1 00

COLLECTION: One pkt. each of above 5 varieties, 60 cts.

Purity

This variety is identical in every way to Daybreak, being of the same symmetrical growth, height, and free-flowering qualities; the flowers, however, instead of being pink, are pure glistening white. **Pkt. 15 cts., ¼oz. $1.**

Mikado

Pink Rochester. A Comet variety, very similar to the Crego's Giant offered, but dwarf in growth and comes into bloom fully two weeks earlier. The plants attain a height of about 1½ feet, of branching habit, and the flowers, borne on long, strong stems, are of colossal size, 5 to 6 inches across being the rule. A charming shade of pink suffused with lavender. **Pkt. 15 cts., ¼oz. $1.**

White. Pure white; a beautiful flower. **Pkt. 15 cts., ¼oz. $1.**

HARDY PERENNIAL ASTERS

Michaelmas Daisies

These handsome flowers are very beautiful and easy of culture.

	Pkt.	¼oz.
Alpinus speciosus. Dark blue. Height 2 ft. July	$0 15	$1 00
Alpinus albus. White	15	1 00
Bessarabicus. Pink. Height 3 ft. August	15	1 00
Subcaeruleus. Large flowers, 3 inches across; very striking, bold orange-yellow center. Height 2 feet	25	1 50

ANTIRRHINUM (Snapdragon)

This is considered one of the finest perennials which may be flowered from seed the first year. Plant-breeders in Europe and America vie with each other in introducing new strains each year. They are very valuable both as a cut-flower for home decoration or for bedding. We offer below ten choice varieties of the Half-High type and six varieties of the Tall type. The Tall varieties are best seen to advantage in long borders in flower-gardens, making splendid subjects for backgrounds, while the Half-High type have now superseded the others in popularity on account of their suitability for bedding. Seed may be sown in the open ground early in May and be had in bloom in July, but it is best to start the plants indoors in pots or flats or in a frame in March and transplant the seedlings out-of-doors as soon as weather will permit.

Giant-flowered Half-High Varieties

Height about 1½ feet

Amber Queen. Amber, suffused chamois.
Apricot Queen. Apricot-pink, white tube.
Carmine Queen. Rose-carmine.
Daphne. Pearly pink.
Defiance. Beautiful scarlet.
Firebrand. Scarlet, with yellow lip.
Fawn. Rose and gold—one of the best colors used alone for bedding.
Golden Queen. Rich, pure yellow.
Mont Blanc. Pure white.
Rose Dore. Rose tone, orange suffusions.

Named varieties, each, pkt. 15c., ¼oz. 75c.; mixed, pkt. 10c., ¼oz. 60c.
COLLECTION: One pkt. each of above 10 fine varieties, $1

Giant-flowered Tall Varieties

Height about 3 feet

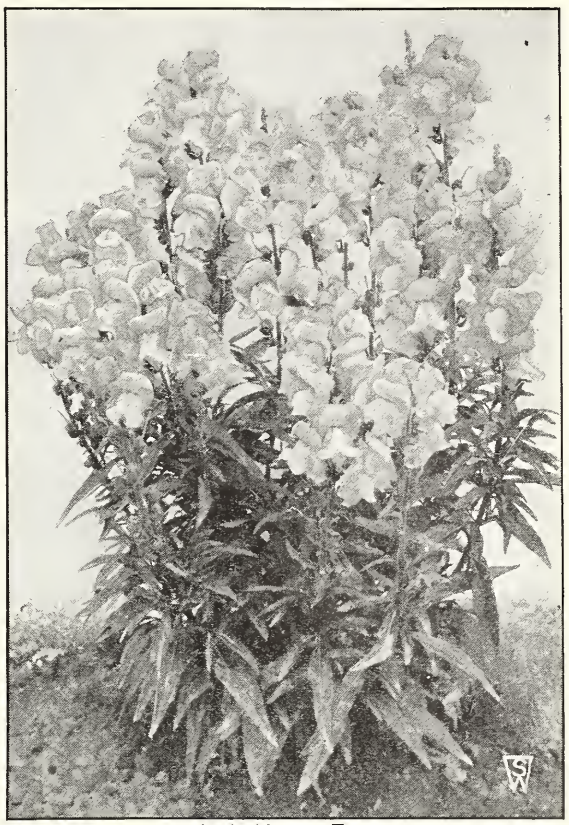
We offer a selection of the best six colors:
Garnet. Garnet.
Delicata. Rose-pink.
Queen Victoria. White.
Rose. Beautiful rose-pink.
Scarlet. Bright scarlet.
Yellow. Rich golden yellow.

Named varieties, each, pkt. 15c., ¼oz. 75c.; mixed, pkt. 10c., ¼oz. 60c.
COLLECTION: One pkt. each of above 6 distinct colors, 50 cts.

ARCTOTIS GRANDIS (African Daisy)

A remarkably handsome annual from southwestern Africa. It forms much-branched bushes 2 to 3 feet high, its flowers are large and showy, being pure white on the upper surface. There are few annual flowers grown in the garden more valuable for cut-flower work than the Arctotis. It is easily grown from seed, and may be started in hotbed, in the house or in the open ground, the seed germinating in about five days. The plants may be expected to come into bloom early in July and continue until quite hard frost. It delights in a sunny situation. As a cut-flower it is especially valuable, the blooms lasting a week or ten days in water, and if undeveloped buds are cut and placed in a sunny window, every one will open and produce as fine flowers as though left on the plant. **Pkt. 15 cts., ¼oz. 75 cts.**

Arctotis Grandis



Antirrhinum, Fawn

ARABIS (Rock Cress)

One of the prettiest and earliest of the hardy perennial spring flowers. Splendid for edging and rockeries. The spreading tufts are covered with a sheet of pure white flowers as soon as snow disappears. **Pkt. 15c., ¼oz. 50c.**

ARGEMONE (Mexican, or Prickly Poppy)

Mexicana. A very interesting and highly ornamental plant, both in and out of bloom. The plants are of sturdy character, attaining a height of 3 feet. The ornamental spiny foliage has a clear silvery mid-rib, a splendid color contrast. The flowers are poppy-like, of satiny texture, over 3 inches across, in various shades of rich yellow to creamy white. It blooms early in July and continues without interruption until November. Sow seed where intended to bloom in May, thinning out later; does well in a sunny location and light soil. Pkt. 10 cts., ¼oz. 50 cts.
Platyceras rosea. A recent introduction similar in habit of growth and foliage to the above with rich ruby-rose flowers. Pkt. 15 cts., 2 pkts. 25 cts.

ARISTOLOCHIA (Dutchman's Pipe)

Sipho. A very attractive and highly ornamental climber, with flowers resembling the pitcher plant. Pkt. 10 cts.

ASPARAGUS

Plumosus nanus. A graceful pot-plant for either house or conservatory. Finely cut foliage. Pkt. 25 cts., 100 seeds $1.
Sprengeri. Drooping foliage, adapted for hanging-baskets or cutting. Pkt. 25 cts., oz. $1

ASPERULA (Sweet Woodruff)

Odorata. Hardy perennial. Handsome creeping plant, with deep green, whorled foliage and pretty white flowers. Especially useful for carpeting in shady situations. Height, 6 inches. June and July. Pkt. 10 cts., ¼oz. 50 cts.

AUBRIETIA (False Wall Cress)

Pretty, dwarf-growing rock plants, forming broad masses of silvery green foliage and sheets of flowers in spring and early summer.
Bougainvillei. Showy purple flowers. Pkt. 15 cts.
Leichtlinii. Bright reddish crimson. Pkt. 15 cts.

Double Camellia-flowered Balsam

DOUBLE CAMELLIA-FLOWERED BALSAM (Lady's Slipper)

An old and favorite garden flower, producing its gorgeous masses of beautiful, brilliant-colored, double flowers in the greatest profusion; of easiest culture; succeeds in a good, rich soil. Tender annuals. 2 feet. Start the seed indoors in April, or sow out-of-doors in May. When specimens are wanted, plant at least 18 inches apart; splendid when grown in pots.

	Pkt.	Oz.
White Perfection. Large; double; white	$0 10	$1 00
Scarlet King. Glowing, fiery scarlet; large, double flowers	10	1 00
Salmon Queen. Deep rose-pink; large, double flowers.	10	1 00
Lilac Gem. Beautiful pale lilac	10	1 00
Purple King. Double; rich purple	10	1 00
Primrose Gem. Double; beautiful primrose; the best yellow variety to date	10	1 00

COLLECTION: 1 pkt. each, 6 named varieties, 6 pkts., 50 cts.

S. & W. Co.'s Double, Mixed. A mixture of selected self-colors as well as beautiful, spotted, blotched and striped varieties. **Pkt. 10 cts., oz. $1.**

BEGONIAS

Everblooming Bedding Varieties

The following varieties of *Begonia semperflorens* and *B. gracilis* take rank as bedding plants with geraniums and coleus, doing equally well in full sunlight, and surpassing both in positions partially or wholly in shade. They are of sturdy growth, growing about 1 foot high, and forming dense bushes which, from May until frost, are completely hidden with flowers. As pot-plants for winter flowering they are superb, being a mass of bloom throughout the entire year. Easily raised from seed, which should be started either indoors or in a hotbed.

	Pkt.
Gracilis, Primadonna. Carmine-rose; brown-tinted foliage	$0 25
Gracilis, Bonfire. Scarlet; metallic brown foliage	25
Gracilis luminosa. Brilliant dark scarlet; very effective	25
Semperflorens Erfordii. Rosy carmine; green foliage	15
Semperflorens, Triumph. Pure, glistening white	15
Semperflorens, Vernon. Bright orange-carmine; red foliage	15
Tuberous-rooted Single, Mixed. Excellent for indoor culture only	25
Tuberous-rooted Double, Mixed. The double form	25

BALLOON VINE (Love-in-a-Puff)

This rapid-growing annual climber succeeds best in a light soil and sunny situation. The flowers are white and the seed-vessels which resemble miniature balloons, are very interesting to children. Seed should be sown as soon as ground becomes warm, in an open situation. 8 feet. Pkt. 10 cts., ¼oz. 25 cts.

BAPTISIA (False Indigo)

Australis. Hardy perennial. Free-growing plant, with deep green cut foliage and lupine-like dark blue flowers in long racemes. 3 feet. June and July. Pkt. 10 cts., ¼oz. 75 cts.

BARTONIA

Aurea. Hardy annual. Very bright golden flowers from July to September. Fine for cutting. 1 foot. Pkt. 10 cts., ¼oz. 50 cts.

BOCCONIA (Plume Poppy; Tree Celandine)

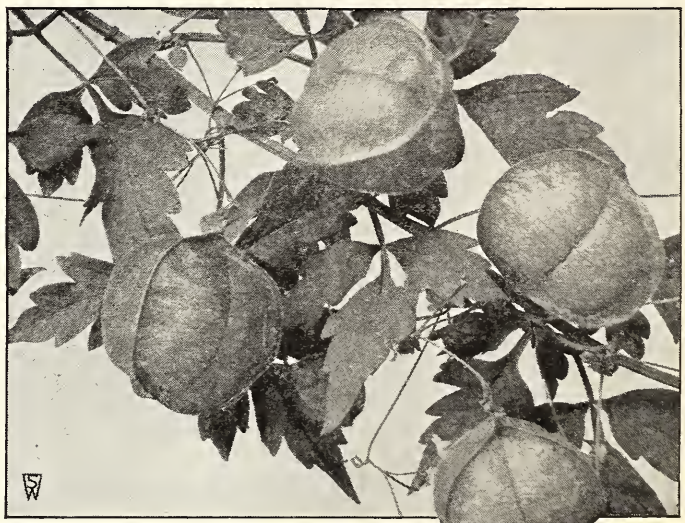
Cordata. Effective, hardy perennial for single specimens or groups on lawns. Foliage glaucous green; bears freely spikes 2 to 3 feet long of cream-colored flowers; easily raised from seed. 5 feet. Pkt. 10 cts., ¼oz. 50 cts.

BOLTONIA (False Chamomile)

One of the showiest of our native hardy perennials, growing 4 to 6 feet high, with daisy-like flowers, borne in great numbers from July to September.

Asteroides. White. Pkt. 10 cts.

Latisquama. Lilac-pink. Pkt. 10 cts.



Balloon Vine

THREE KING CALENDULAS

(*Scotch Marigolds*)

FEW, if any, of the annual flowers have gained in popularity as has the Calendula in recent years. Florists throughout the United States now grow it in large quantities in the greenhouse benches in the autumn, and it may be seen in the florists' shops throughout the year. Its depth of color meets with instant favor from the discriminating flower-lover, and its great adaptability as a cut-flower for home and table decoration has helped to increase its popularity. Our growers have, through painstaking efforts, worked up a strain, the plants of which are more robust in character, bloom more freely, with flowers larger, more double, and very intense in color. Seed should be sown in the open ground where intended to bloom in the early spring; thin out to leave 1 foot of space between the plants.

Orange King. Deepest orange.
Golden King. Rich golden yellow.
Lemon King. Rich lemon-yellow.

Each, pkt. 25 cts., ¼oz. 50 cts., oz. $1.50

COLLECTION. Pkt. each of above 3 varieties, 50 cts.; ¼oz. each of above 3 varieties, $1

CALLIOPSIS

(Flower natural size)

FEW of the annual flowers are of easier culture than the Calliopsis and the new forms which plant-breeders have developed in recent years have caused us to feature them in color. They are very showy and splendid subjects for garden decoration as well as for cutting.

Sow seed where intended to bloom in early spring; thin out to 6 inches apart. In order to get long stems, part of the foliage should be cut with flower, as in this way they make excellent subjects for table decoration. Cut flowers as soon as they open, as this prolongs the blooming season until late in the autumn. It is advisable to keep beds free of weeds and water copiously during hot weather.

1 Golden Wave. Rich golden yellow, chestnut-brown center. Height, 12 inches.

2 Crimson King. Splendid dwarf variety; rich velvety crimson-garnet. Height, 10 inches.

3 Marmorata. Rich golden yellow and wallflower-red. Height, 24 inches.

4 Tiger Star. Rich reddish brown, tigered with golden yellow. Height, 10 inches.

5 Nigra Speciosa. Strong grower; large, rich reddish brown flowers. Height, 24 inches.

6 Bicolor Nana. Dwarf; compact; clear yellow, small garnet eye. Height, 10 inches.

Each, pkt. 10 cts., ¼oz. 50 cts., oz. $1.50

COLLECTION
One pkt. each of above 6 varieties, 50 cts.; ¼oz. each of above 6 varieties, $2.50

Bellis perennis

BELLIS (English Daisy)

A favorite perennial, which will stand the winter if given the protection of a little litter. In bloom from early spring until well on in the summer. Easily raised from seed, which may be sown any time from spring until August. For best results, new plants should be raised from seed each year. The following are the finest double-flowering kinds, selected after careful test.

		Pkt.		Pkt.
Giant-flowering	**White**	$0 25	**Snowball.** White	$0 15
" "	**Pink**	25	**Longfellow.** Pink	15
" "	**Mixed**	25	**Double Red Quilled**	25

BEAN

Scarlet Runner. The well-known rapid-growing annual climber, with bright red flowers from July to September. Fruit is a most delicious vegetable. 8 feet. Pkt. 10 cts.

CALENDULA (Pot Marigold)

This is one of the best and showiest, free-flowering, hardy annuals, growing in any good garden soil, and producing a fine effect in beds or mixed borders.

	Pkt.	¼oz.
Golden King. Rich golden yellow	$0 25	$0 50
Lemon King. Rich lemon-yellow	25	50
Meteor. Large; double; yellow, each petal striped with orange	10	25
Orange King. Deepest orange	25	50
Pongei fl.-pl. Large, double, white flowers	10	25
Prince of Orange. Similar to Meteor, but darker	10	25
Ranunculoides fl.-pl. Striped and margined	10	25
Sulphurea fl.-pl. Large, double flowers of pleasing sulphur-yellow	10	25

CALLIOPSIS

Showy and beautiful, free-flowering annuals and perennials, of the easiest culture, doing well in any sunny position, blooming all summer, and excellent for cutting and massing. It is best to sow them where they are to bloom, thinning out to stand 6 inches to 12 inches apart. By keeping the old flowers cut off the flowering season can be lengthened until late autumn.

ANNUAL VARIETIES

Bicolor nana. Dwarf, compact, clear yellow, small garnet eye. Height, 10 inches.
Crimson King. Splendid; dwarf; rich velvety crimson-garnet. Height, 10 inches.
Golden Ray. Dwarf, compact plants not over 9 inches high, densely covered rich maroon flowers edged golden yellow, the petals twisted like the cactus dahlia.
Golden Wave. Rich golden yellow, chestnut-brown center. Height 1 foot.
Marmorata. Tall grower; rich golden yellow and wallflower-red flowers. 2 feet.
Nigra speciosa. Strong grower; large flowers of rich reddish maroon. Height, 2 feet.
Tiger Star. Rich reddish brown, tigered with golden yellow.
Tinctoria. A very striking tall-growing variety. The flowers are a bright yellow and maroon, evenly divided in color combination. Height, 2 feet.

Each, pkt. 10 cts., ¼oz. 50 cts., oz. $1.50.

COREOPSIS. PERENNIAL VARIETIES

The following two varieties of Perennial Calliopsis are usually sown in June and transplanted 1½ to 2 feet apart. Give slight winter covering. May be had in flower the first year if sown under glass in January.
Grandiflora. Deep golden yellow, cup-shaped flowers, on fine stems for cutting. Height 2 feet. All summer. Pkt. 10 cts., ¼oz. 40 cts.
Lanceolata grandiflora. Same as above except flower is lanced. Pkt. 10c., ¼oz. 75c.

BROWALLIA (Amethyst)

One of our favorite profuse-blooming bedding plants, covered with rich, beautiful, winged flowers during the summer and autumn months, supplying a very uncommon shade of intense blue; grows freely in any rich soil; blooms finely in the winter if the plants are lifted in autumn and cut back.

Speciosa major. A beautiful-flowering variety of the most brilliant ultramarine-blue—a rare color. Does finely outside in the border, or in hanging-baskets or vases, but is especially valuable as a pot-plant for winter and early spring flowering. Pkt. 25 cts.

BRACHYCOME (Swan River Daisy)

Free-flowering, dwarf-growing annuals, covered during the greater part of the summer with a profusion of pretty blue or white flowers, suitable for edgings, small beds or pot culture. Height, 9 inches.

Iberidifolia, Blue. Pkt. 10 cts.
Iberidifolia, White. Pkt. 10 cts.

CACALIA

Coccinea. (Tassel Flower; Flora's Paint-Brush.) A neat annual, of easy culture, with bright red, tassel-shaped flowers; blooms from June to September; fine for borders. Pkt. 10 cts., ¼oz. 60 cts.

CALCEOLARIA

The strains offered herewith are grown by a famous English seed-growing specialist and are the finest in existence. The S. & W. Co.'s Giant Strain is intended for conservatory growing; the Rugosa for outside bedding.

S. & W. Co.'s Giant Strain. Pkt. 50 cts.
Rugosa. Shrubby; for bedding. Pkt. 50 cts.

CHELONE (Turtlehead)

Beautiful hardy perennial; very decorative; fine for cutting; should be grown in every garden.

	Pkt.	¼oz.
Barbata coccinea. Red. Summer. 3 feet	$0 10	$0 50
Barbata Torreyi. Coral-red. Summer. 3 feet	10	50

Brachycome

CAMPANULA, or BLUEBELLS

PERENNIAL VARIETIES

These are among our best-known hardy perennials. The tall varieties are fine for cutting, while the dwarf sorts make excellent border plants. All have dainty bell-shaped flowers. Some of the varieties offered will flower the first season from seed if sown early.

	Pkt.	¼oz.
Carpatica. This variety is largely used for edging. Flowers of deep blue all summer. Height, about 6 inches	$0 15	$0 75
Carpatica alba. The white-flowered form of the above	15	75
Macrantha. Blue	10	50
Persicifolia grandiflora, Blue (Peach Bells). One of the finest of the hardy Bellflowers; grows 2 to 3 feet high, with large, blue flowers.	15	1 50
Persicifolia grandiflora alba. The white-flowered form of the above	15	1 50
Pyramidalis (Chimney Bellflower). Spikes 3 to 4 feet tall; erect, pyramidal flowers, large and of beautiful blue. Splendid for both garden and pot culture	15	75
Pyramidalis, White	15	75

CAMPANULA MEDIUM (Canterbury Bells)

These are strictly biennials, and require to be sown from June 1 to September 1; when strong enough, transplant to a distance of 6 inches apart; after frost has set in, protect with leaves and straw. They flower the following June, after which they die. Their colors are so pure that gorgeous effects can be achieved with them.

	Pkt.	¼oz.		Pkt.	¼oz.
Single White	$0 10	$0 50	**Single Striped**	$0 10	$0 50
Single Rose	10	50	**Single Mixed**	15	50
Single Blue	10	50	**Double Mixed**	15	75

CAMPANULA CALYCANTHEMA (Cup-and-Saucer)

These produce beautiful, large, single flowers resembling a cup and saucer; they require the same treatment as *Campanula Medium*.

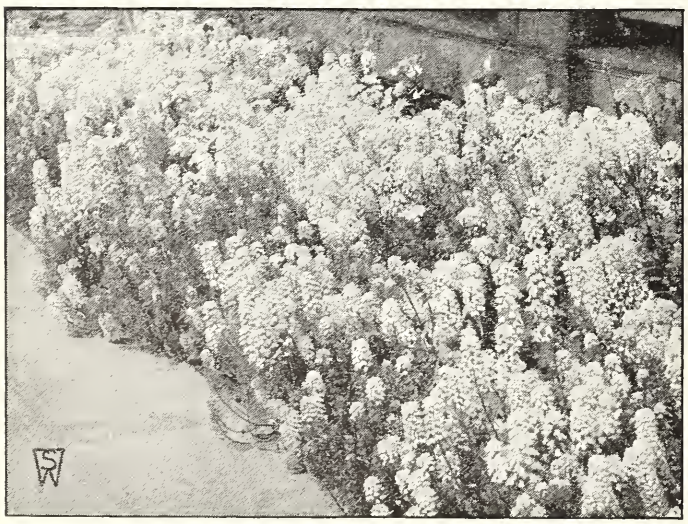
	Pkt.	¼oz.		Pkt.	¼oz.
Blue	$0 15	$1 00	**Rose**	$0 15	$1 00
White	15	1 00	**Striped**	15	1 00
			Mixed	10	75

Campanula Medium

CANDYTUFT (Iberis)

The Candytuft is almost as fragrant as the sweet alyssum and very popular. Very useful as a bedding plant or for border work. Sow outdoors in April, where it is to bloom, and thin well when the plants grow about 1 inch. Sow also in July for fall blooming. Where grown in rows, best results for cut-flowers can be obtained only by giving the plants at least a foot apart in the rows and 1½ feet between the rows.

	Pkt.	Oz.
S. & W. Co.'s Giant Hyacinth-flowered. We consider this the finest white variety, which, through selection, has been greatly improved. The flowers are of large size, borne in large trusses well above the foliage. Finest for cutting or for the border	$0 15	$2 00
Empress. Excellent; white	10	1 00
Dunnett's Crimson. Deep crimson	10	75
Pink Beauty. New. Fine pink. Height, 1 foot	15	2 00
Lilacina. Lilac. Height, 1 foot	10	75
Mixed, All Colors	10	50



S. & W. Co.'s Giant Hyacinth-flowered Candytuft

PERENNIAL CANDYTUFT

A very early-flowering variety, largely used in the hardy border. Foliage exceedingly pleasing in color and very decorative.

Gibraltarica. White, shaded pink. Pkt. 15 cts., oz. $3.

Sempervirens. Pure white flowers; evergreen foliage. Pkt. 15 cts., oz. $2.50.

CANARY-BIRD FLOWER (*Tropaeolum canariense*)

A rapid-growing, tall climbing annual, producing hundreds of its pretty, fringed, bright yellow flowers, which resemble a canary-bird with expanded wings. Pkt. 10 cts., ¼oz. 50 cts.

CARNATIONS

Carnations are general favorites for their delicious fragrance and richness of colors. They are indispensable, both for greenhouse culture in winter and for the garden in summer. The Marguerite and Chabaud's types are the best for summer-flowering.

Chabaud's Everblooming. Raised by a famous French specialist. Blooms in five months after being sown, and continues to flower in the greatest profusion indefinitely. Mixed colors. Pkt. 25 cts., 5 pkts. $1.

GIANT MARGUERITE CARNATIONS

These are deservedly the most popular Carnations with the amateur, as they begin flowering in July or August if sown early in the spring. The strain offered is of extra-fine quality, producing on long, strong stems an abundance of large, double, beautifully fringed, highly scented flowers; with slight protection they will survive an ordinary winter and bloom freely the following spring.

Giant Pink **Giant Crimson** **Giant Yellow**
Giant White **Giant Scarlet** **Giant Mixed**

Each, pkt. 10 cts., ¼oz. $1, oz. $3
COLLECTION: One pkt. of each of above 5 varieties, 40 cts.

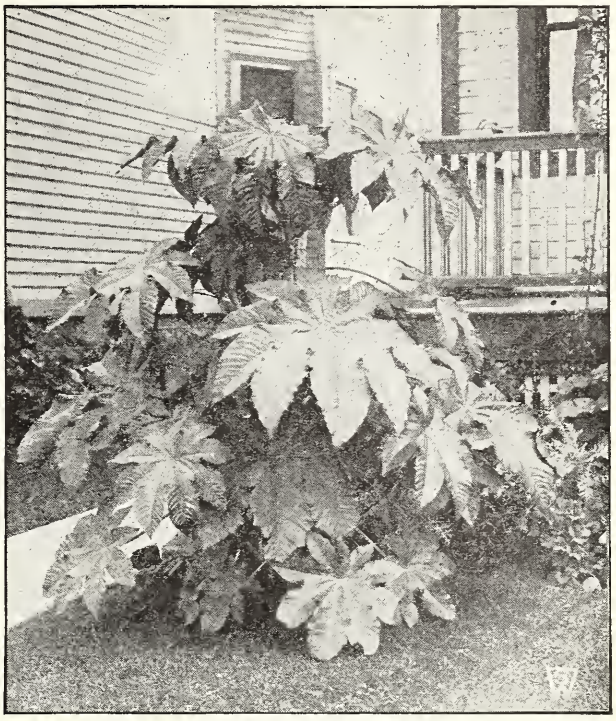
CERASTIUM

Tomentosum. Hardy perennial. A very pretty dwarf, white-leaved edging plant, bearing small white flowers. Pkt. 15 cts.

CASTOR-OIL PLANT (Ricinus)

The Ricinus are tall, stately growing plants of tropical appearance; their luxuriant foliage renders them exceedingly ornamental. They are free-growing, tender annuals of easy cultivation. Half-hardy annuals.

	Pkt.
Africanus. Very large green foliage	$0 10
Zanzibarensis. New Giant Castor-Oil Plant from Africa	10
Borboniensis arboreus. Large and handsome green foliage. 15 feet	10
Communis (Castor-Oil Plant). Green foliage. 6 feet	10
Gibsonii. Dark, purplish-red foliage. 6 feet	10
Cambodgensis. Leaves bronzy maroon, with red veins; stems black	10
Duchess of Edinburgh. Dark red foliage. 6 feet	10
Gibsoni mirabilis. Dwarf, compact; very fine	10
Sanguineus. Tricolor, red spotted; fruit in clusters; red foliage. 10 ft.	10
Mixed .lb. $2, oz. 25 cts.	10



CASTOR-OIL PLANT

CELOSIA

Celosia cristata (Cockscomb)

Free-blooming annuals, growing best in rather light soil, not too rich; make grand border plants and are attractive for pots. Seed can be sown under cover in early spring and planted out in May, or may be sown outdoors in May. If dwarf growth is desired, do not crowd.

Empress. Rich crimson. 1 foot. Pkt. 15 cts., ¼oz. $1.
Glasgow Prize. Dark crimson. 1 foot. Pkt. 15 cts., ¼oz. $1.
Dwarf Mixed. 1 foot. Pkt. 10 cts., ¼oz. 75 cts.

Celosia plumosa (Feathered Cockscomb)

Make fine plants for large beds or groups, and the plumes or flowers can be cut and dried for winter bouquets. Should be treated same as Cockscomb described above.

Ostrich-plumed, Crimson. Pkt. 10 cts., ¼oz. 50 cts.
Ostrich-plumed, Yellow. Pkt. 10 cts., ¼oz. 50 cts.
Ostrich-plumed, Mixed. Pkt. 10 cts., ¼oz. 50 cts.

CELOSIA, PRIDE OF CASTLE GOULD

Celosia Thompsonii magnifica

Improved Strain of Feathered Cockscomb

Thompsonii magnifica is of pyramidal growth, often attaining the height of 3 feet, and producing graceful, feathery plumes of the most magnificent shades, ranging from the clearest yellow to the darkest blood-red.

Thompsonii magnifica, Crimson. Bright crimson. Pkt. 15 cts., ¼oz. $1.
Thompsonii magnifica, Yellow. Beautiful yellow. Pkt. 15 cts., ¼oz. $1.
Thompsonii magnifica, Mixed. Pkt. 10 cts., ¼oz. 75 cts.

Celosia, Pride of Castle Gould

An entirely distinct type of the *Celosia pyramidalis plumosa*, and surpasses by far anything thus far placed on the market. This strain has through constant culture and careful selection and hybridization proved its superiority to anything similar ever offered.

HABIT OF PLANTS.—Pyramidal, compact growth of from 2 to 3 feet, with immense, extra-fine feathered heads, gives the plant a most striking appearance.

COLOR.—The following distinct colors are among these hybrids: Blood-red, real carmine, golden yellow, salmon, deep scarlet, dark orange and wine-red; however, by variation there will be found many more shades; the self-coloring will be surprising.

This illustration is from a photograph taken on the estate of M. C. D. Borden, Oceanic, N. J. (William Turner, Supt.). The following is a description by William Turner: "Celosia Castle Gould is admirably adapted for growing along in pots for decorative purposes or for planting out in beds, provided the beds are situated to receive full benefit from the sun's rays. Castle Gould is a decided improvement over all other Celosias, both for richness of colors and the massive plumes this variety produces. Being a free, vigorous grower, it is not necessary to sow the seed for outdoor planting until say the middle of March. They would then be nice, vigorous plants in 3- or 3½-inch pots, ready for placing in the beds about the end of May. With a little care, they would be a mass of gorgeous plumes until killed down by frost." Per pkt., mixed shades, 25 cts., 5 pkts. $1.

CENTAUREAS

There is, perhaps, no more popular annual than the Centaurea. Will grow well anywhere and as a cut-flower is much in demand.

Cornflowers (*Centaurea Cyanus*)

SOMETIMES CALLED BACHELOR'S BUTTON, BLUE BOTTLE, RAGGED SAILOR, ETC.

This type of Centaurea is well known and no garden is complete without them. Seeds should be sown in the spring or fall. When large flowers are wanted, plants should be thinned out to a space of say 8 square inches.

	Pkt.	¼oz.
Cyanus, Blue. Old-fashioned blue cornflower. Well-known favorite cut-flower	$0 10	$0 30
" **Rose**	10	30
" **White**	10	30
" **Victoria.** A very dwarf mixture, used for borders or pots; grows 8 inches high	10	50
" **Mixed Single**	10	30
Cyanus, Double Blue. A variety largely used by the commercial florist on account of its large size. Much in demand for cutting, taking fewer than the single varieties to make a bunch	15	75
Cyanus, Double Mixed	10	40

Giant Sweet Sultans (*Centaurea imperialis*)

This beautiful class is undoubtedly the finest of all the Sweet Sultans for cutting purposes. Beautiful, deliciously sweet-scented flowers are borne on long, strong stems and are particularly striking, lasting several days after cutting. We recommend sowing in succession every two weeks from May until July, thereby giving a continuous bloom from summer to fall.

Imperialis, White. Large and exquisitely sweet-scented.
Imperialis, Pink. Pink, with tinge in center.
Imperialis, Purple. Brilliant rosy purple.
Imperialis, Lilac. Beautiful lilac.
Imperialis, Rose. Brilliant rose.
Imperialis, Mixed. A select mixture of above colors.

Pkt. of any of the above, 15 cts., ¼oz. 50 cts.

COLLECTION: One pkt. each of the 5 colors, 50 cts.

CENTAUREA IMPERIALIS (Giant Sweet Sultan)

CENTAUREA CYANUS (Cornflower)

White-leaved Centaureas (Dusty Millers)

Extensively used for edging of beds or borders of the flower-garden. The glistening white, contrasted with the bright color of the coleus, salvia or red canna, is very striking.

	Pkt.	¼oz.
Candidissima. This hardy, rapid-growing annual is only grown for its foliage which is very lanced and silver coated. An excellent edging plant	$0 10	$0 75
Gymnocarpa (Dusty Miller). Leaves fern-like; a trifle taller than Candidissima	10	50

Various Centaureas

	Pkt.
Americana. The stems, foliage, and flowers of this Cornflower are gigantic in size compared with the regular sorts. The flowers, which appear thistle-like, attain the size of 4 inches when fully expanded and are of a splendid, deep lavender-color, making an excellent subject for garden decoration or cuttings. Like the Cyanus, it is easily flowered from seed sown outdoors; plants should be placed at least 1 foot apart. Height 3 feet. 5 pkts. 50 cts.	$0 15
Macrocephala. This is a hardy perennial variety with large, thistle-like, golden yellow flowers, useful for cutting and fine for the hardy border. Blooms during July and August. 3½ feet	10
Montana (Perennial Cornflower). Grows 2 feet high, bearing large, violet-blue flowers from July to September	10
Montana alba. Large, white form of the above. 2 pkts. 25 cts.	15
Suaveolens (Yellow Sweet Sultan). Very showy, large, bright yellow flowers, sweet scented. A very popular sort used extensively by the florist as a cut-flower. ¼oz. 50 cts.	15

Annual Chrysanthemums

CHRYSANTHEMUMS

ANNUAL VARIETIES

We offer a choice selection of the best varieties of this showy hardy annual. They are splendid subjects for the border or for cutting. The plants average 2 feet in height, and bear their daisy-like flowers in great profusion on strong stems.

Beaconsfield. White, with a pink center.
Burridgeanum. White petals, zone of rich brownish red, inner zone yellow.
Eastern Star. Clear yellow petals with dark disc.
Evening Star. Yellow petals, dark disc.
Morning Star. Petals canary-yellow, with a halo of deeper yellow, disc darker.
Northern Star. Large, daisy-like flowers, 3 inches in diameter; pure white, fringed petals with canary-yellow zone around a dark brown eye.
The Sultan. Rich wallflower-red with a narrow yellow zone around the brown disc.

Each, pkt. 15 cts., 2 pkts. 25 cts.
COLLECTION: One pkt. each of above 7 varieties, 75 cts.

	Pkt.	2 Pkts.
Golden Queen. Double; golden yellow	$0 15	$0 25
White Queen. Double; pure white	15	25
Single Annual Varieties Mixed. A choice mixture of Single-flowering varieties	10	¼ oz. $0 50
Double Annual Varieties Mixed. Mixture of double varieties	10	50

PERENNIAL VARIETIES

	Pkt.
Maximum (Hardy White Daisy). Large flowers; perfectly hardy. 3 feet. July to October	$0 10
Maximum leucanthemum (Common Shasta Daisy). White; large. 3 feet. July to October	10
Uliginosum (Giant Daisy). One of the best late-blooming perennials from Russia. Stout, upright plants; pure white flowers. 5 feet. August to October.	25

CONVOLVULUS (Morning-Glory)

Dwarf Bedding Varieties. Mixed. Pkt. 10 cts., oz. 30 cts.
Tall or **Climbing Varieties.** Mixed. Pkt. 10 cts., oz. 30 cts.
See **Ipomœa** for other varieties of Morning-Glories.

CINERARIA

Seed should be sown from May to September where a succession is desired. When sown at this time, fine plants may be secured. The main point in the culture of Cinerarias is to secure as hardy a growth as possible with leaves of medium size. Seed may be transferred direct from seed-pans to thumb-pots. After planting, place in coldframe facing north, if possible. As pots become full of roots, shift to larger ones until flowering size is reached.

S. & W. Co.'s Giant-flowering Mixed. This strain of Prize Cineraria is grown for us by a famous English seed specialist. The flowers seldom measure less than 3 inches in diameter, comprising the following colors: White, rose, flesh, crimson, blue, violet, etc. The plants are of a very robust dwarf habit, which, combined with the mass of giant blooms, makes this strain exceedingly valuable. **Pkt. 50 cts.**

S. & W. Co.'s Giant Sky-Blue, Dark Blue, Flesh-Color, and White. Each, pkt. 50 cts.

Matador. A new large-flowering, deep scarlet; adds brilliance to a collection. **Pkt. 50 cts.**

S. & W. Co.'s Stellata. Delicate star-like blooms are borne in great profusion on long stems, giving this variety a double use, as it is excellent for cutting as well as decorative purposes; all shades.
Tall Mixed. Pkt. 50 cts. **Dwarf Mixed.** Pkt. 50 cts.

CLARKIA ELEGANS

A mighty handsome annual, which should be far more widely known. It is of easy cultivation, graceful in habit of growth, and lends itself as well to bedding as for cutting. Flowers in long racemes which all open in water when cut.

	Pkt.	¼oz.
Single Rose	$0 10	$0 30
Single White	10	30
Single Mixed	10	25

DOUBLE VARIETIES

We consider these varieties of double Clarkias a decided acquisition.

	Pkt.	¼oz.
Salmon Queen. Salmon	$0 10	$0 50
Brilliant King. Crimson	15	50
Purple King. Purple	15	50
Scarlet King. Scarlet	15	50
White King. White	15	50
Double Mixed	15	40

COBÆA (Cup-and-Saucer Vine)

A climber of rapid growth, attaining a height of 30 to 50 feet during the season, valuable for covering trellises, arbors, trunks of trees, etc.; will cling to any rough surface. In sowing, place seeds **edgewise** and merely cover lightly with soil; to get early results, start the seed indoors in March or April; can also be sown out-of-doors in May.

Scandens. Large bell-shaped purple flowers. Pkt. 10 cts., ¼oz. 25 cts.
Scandens alba. Pure white. Pkt. 15 cts., ¼oz. 50 cts.

CLEOME (Spider Flower)

Gigantea. Annual. Singular-looking, rose-colored flowers; the stamens look like spiders' legs, and present a very attractive appearance. This plant is now used extensively in many of the public parks, planted among shrubbery, and is very effective. Sow seed outdoors in May and thin out to stand 2 feet apart. Height 3 feet. Pkt. 10 cts., ¼oz. 50 cts.

Cleome gigantea

MAMMOTH TALL WHITE COSMOS

COSMOS

This is one of the most notable summer and fall flowers, the specialists' skill having added much to its beauty. Many professional gardeners sow their Cosmos late in the spring, as it has been demonstrated, particularly with the Late Mammoth-flowering Tall Cosmos, that early sowing frequently makes enormous, heavy-wooded plants which do not flower any earlier than if sown later.

We recommend the sowing of Cosmos about the first of May, outdoors in rows, covering the seed about ¼inch, and when the plants are about 3 inches high, thin out or transplant to not less than 2 feet apart. Any garden soil will grow Cosmos to perfection; frequent cultivation around the base of the plants will greatly benefit them.

Extra-Early Flowering Dwarf Cosmos

Frequently the amateur finds that the Cosmos of the Late-flowering Tall type, selected by him for growing in borders or beds with other annual flowers, is unsuitable because of it flowering late in the summer, and also growing to the height of 6 to 8 feet. We, therefore, take pleasure in offering this new Early-flowering Dwarf Cosmos, which, if sown outdoors about the first of May, will give an abundance of cut-flowers for the table or home decoration from July until cut down by frost.

This type of Cosmos grows about 4 feet high, and while the flowers are not quite so large as the Late Mammoth-flowering type offered on this page, they are admirably adapted to the use of the suburbanite whose garden-space is small. To those who desire the larger-flowering type, which flowers late, after most other flowers are past, we recommend our Late Mammoth-flowering Tall Cosmos.

	Pkt.	¼oz.	Oz.
Early-flowering, White	$0 10	$0 75	$2 50
" " **Pink**	10	75	2 50
" " **Crimson**	10	75	2 50
" " **Mixed**	10	75	2 50

Late Mammoth-Flowering Tall Cosmos

This type of Cosmos, which has been greatly improved over the old tall small-flowering varieties, flowers late in the summer—usually September in this latitude—and coming at this season of the year, when nearly everything in the garden has finished blooming, it is a very desirable addition.

These tall, graceful plants are most effective when planted in broad masses along background borders against evergreens or shrubs. The gigantic flowers, borne on long stems, and the feathery foliage lend themselves to graceful arrangements for bouquets.

	Pkt.	Oz.
Mammoth Tall, White	$0 10	$1 00
" " **Pink**	10	1 00
" " **Crimson**	10	1 00
" " **Mixed**	10	1 00

Lady Lenox. This is the very latest development of this popular autumn flower, bearing gigantic flowers, the petals having a wide overlapping character and of splendid substance; its beautiful, deep rosy pink color and splendid form make this Cosmos one of the most widely grown. **Pkt. 10 cts., ¼oz. 50 cts., oz. $1.50.**

Lady Lenox, White. Similar to above, but white. Pkt. 15 cts., ¼oz. $1, oz. $3.

New Double-Flowering Cosmos

Some years ago, when we first offered in our Novelties and Specialties this splendid new form of Cosmos, which was of Australian origin, we considered it a notable addition to this beautiful family of easily grown annuals for cutting. We are pleased to announce, however, that due to the painstaking effort on the part of an American grower, this strain has been further improved upon, in size of flower, greater degree of doubleness, and general vigor of the plant. We offer three distinct colors as well as a mixture of the three.

Double Pink. Beautiful rose-pink.
Double White. Pure glistening white.
Double Crimson. Rich rose-crimson.
Double Mixed. Mixture of the three.

Each, pkt. 20 cts., 6 pkts. $1

CUPHEA (Cigar Plant)

Pretty, half-hardy perennials; fine for the border or as a pot-plant.

Platycentra. This variety of the Cupheas bears long tube-shaped scarlet flowers all summer. Pkt. 15 cts., 2 pkts. 25 cts.

CYCLAMEN (Giant-flowering)

The following varieties of Cyclamen seed are American-grown. They have been developed from the best of Continental and European strains. They make very beautiful house-plants. Seed is usually sown in the autumn.

Fairy Queen. A very large, magnificent, frilled white, with a crimson eye. Pkt. $1, 100 seeds $5.

Pride of Cincinnati. A semi-double salmon; very large and free-flowering; one of the finest of its color. Pkt. $1, 100 seeds $5.

	Pkt.	100 seeds
Glory of Wandsbek. Light and dark shades of salmon.	$0 50	$3 50
Brilliant Red. Very large and fine	50	3 50
Christmas Cheer. Blood-red	50	3 50
Rosea superba. A very pretty shade of shell-pink. Large flower and excellent grower	50	3 50
Magnifica. Dark rose-pink; very fine	50	3 50
Victoria. White, tipped with pink, fringed edge	50	3 50
Daybreak. Delicate pink; very beautiful	50	3 50
Pure White. Very large	50	3 50
White, Pink Eye. Very large and fine	50	3 50
Lavender. Dark and light shades, very beautiful	50	3 50

CYPRESS VINE (Ipomœa Quamoclit)

One of the most popular of annual climbing plants with very delicate fernlike foliage, and masses of beautiful, small, star-shaped flowers. It is advisable to soak seed in water for a few hours before planting out in order to hasten the germination. Frequently attains a height of 15 feet; sow outdoors in May. **We offer it in three colors, also a mixture.**

Crimson White Mixed

Each, pkt. 10 cts., ¼oz. 25 cts.

DAHLIA

Half-hardy perennial. The seed we offer has been saved from a superb collection of the finest-named varieties.

	Pkt.
Giant Peony-flowered, Mixed. Saved from finest blooms	$1 00
Cactus, Mixed. Saved from a choice collection	1 90
Double-flowering Exhibition Strain, Mixed. Saved from fine Show sorts	1 00

DATURA

Cornucopia (Trumpet Flower). A grand annual plant. The flowers average 8 inches long by 5 inches across; French white inside, purple outside; delightfully fragrant. Started early, will flower from early summer until fall. Pkt. 10 cts.

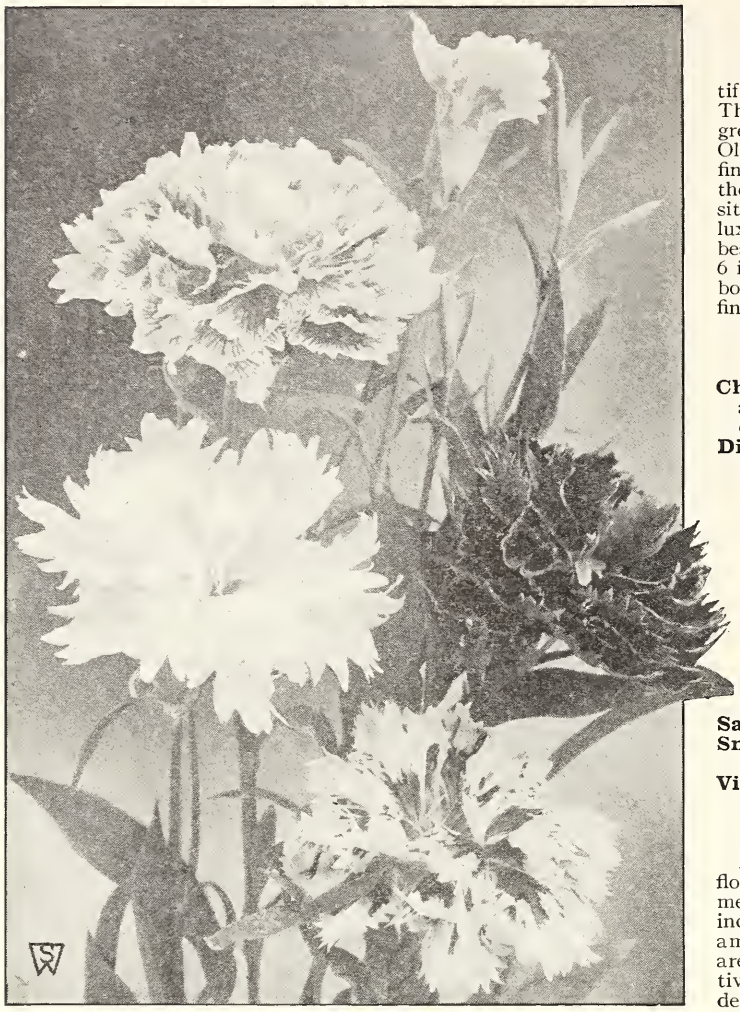
DELPHINIUM (Perennial Larkspur)

There is, perhaps, no better known hardy plant than the Delphinium. The beautiful flowers, borne on tall, stately spikes, are a gorgeous sight and a charm to the garden. Sow seeds in early spring in shallow boxes indoors or in a hotbed. When seedlings are about 1 inch high, transplant to flats 3 to 4 inches apart each way. About a week before planting out, remove to the open, taking care to protect them on cold days and nights; set out 6 inches apart in the garden. Plants treated thus usually flower the first season, during August. In the fall they may be lifted and set out in groups of colors, three or four plants at a distance of 3 feet apart, in the rear of hardy perennials, where they make a fitting background.

	Pkt.	¼oz.
Chinense (Blue Butterfly). A distinct and neat variety, growing about 1½ feet high, with fine, feathery foliage, and producing freely spikes of large blossoms of intense gentian-blue	$0 10	$1 00
Album. The white-flowered form of the preceding	10	75
Barlowii. Very large, dark blue flowers; extra-fine	25	2 00
Belladonna (Everblooming Hardy Larkspur). One of the finest and most continuous-blooming hardy Larkspurs. Clear turquoise-blue flowers, unequaled for delicacy and beauty. 5 pkts. $1	25	
Cardinale. A very beautiful cardinal-scarlet; plants grow about 1½ feet high	$0 25	$2 00
Formosum. Large; rich dark blue, white center; borne on spikes 2 to 3 feet tall; one of the most popular varieties	10	1 00
Formosum cœlestinum. Beautiful sky-blue, white center; similar in habit to the above	20	1 50
Nudicaule. Dwarf compact growth, with spikes of bright scarlet flowers. Height, 1½ feet	25	

Gold Medal Hybrids. This splendid strain is of strong, vigorous habit, with immense spikes from 2 to 3 feet long, of large flowers mostly in fine shades of light blue. We doubt very much if this wonderful strain can be surpassed, and recommend that all our patrons desirous of obtaining some choice plants grow these hybrids. **Pkt. 25 cts., 5 pkts. $1.**

Delphinium (Gold Medal Hybrids)



Double Annual Pinks

DIANTHUS (Pinks)

In this large and greatly varied genus are some of our most beautiful and best-loved flowers, unsurpassed for color and fragrance. They are hardy biennials that bloom finely the first season, remaining green all winter and blooming the next year also, if lightly protected. Old plants flower the earliest, but as young ones give the largest, finest flowers, sowings are made every year. Seed may be sown in the open in early spring when the danger of frost is past and if the situation is open and the ground is well prepared, they will flower luxuriantly in a few weeks' time and continue until hard frost. For best results seedlings should be thinned out to have plants stand 6 inches apart. They average 1 foot in height and are splendid for borders and for cutting. The double-flowering varieties are quite as fine as carnations for cutting.

DOUBLE ANNUAL VARIETIES

	Pkt.	¼oz.
Chinensis fl.-pl. (China, or Indian Pink). Flowers are borne in clusters, very double and in a large range of bright colors	$0 10	$0 25
Diadematus fl.-pl. (Double Diadem Pink). Beautiful double flowers in various tints of lilac, crimson, purple; outer edges fringed	10	75
Fireball. New. Extra double brilliant dark scarlet; very beautiful	15	1 00
Heddewigii fl.-pl. (Double Japan Pink). Double mixed, color varying from richest crimson to most delicate rose	10	75
Laciniatus fl.-pl. (Double Fringed Pink). Large double flowers in a great variety of colors; edges fringed	10	75
Lucifer. Brilliant orange-scarlet, flowers measuring about 2 inches across; very dazzling and popular variety; nicely fringed	15	1 25
Salmon King. Brilliant salmon-rose	10	50
Snowball. Large; double; white; excellent for border or cutting	15	50
Violet Queen. A rich violet—rather unusual shade	10	75

SINGLE ANNUAL VARIETIES

Among these single sorts are many beautiful varieties, and the flowers often measure 2 to 3 inches in diameter. They are very effective for borders or beds.

	Pkt.	¼oz.
Crimson Belle. Rich crimson. Height, 1 foot	$0 10	$0 50
Eastern Queen. Delicately marbled rose and mauve flowers	10	50
Queen of Holland. Beautiful white	10	75
Laciniatus (Single Fringed Pink). Flowers fringed, in a great variety of colors	10	35
Salmon Queen. Beautiful fringed flowers of brilliant salmon color changing to old rose when fading	10	50
Vesuvius. Beautiful orange-scarlet flowers; striking in beds or borders.	10	50

Single Annual Pinks

S. & W. Co.'s Special Mixture of Annual Sorts. A grand collection of these ever-popular garden, or China Pinks. All large-flowering varieties, unrivaled for brilliancy and rich variety of color, and bloom in perfect succession during the whole summer and autumn in such numbers as fairly to crowd each other for room. Mixed colors. **Pkt. 10 cts., ¼oz. 50 cts.**

COLLECTION OF ANNUAL SORTS: One pkt. each of 10 choice Dianthus, 5 named Double and 5 named Single sorts for 75 cts.

HARDY GARDEN PINKS

These form low, bushy, tufted plants, above which are produced, on long stems, the beautiful fringed and fragrant flowers so valued in "old-fashioned" gardens. For permanent beds and borders these Pinks are unrivaled.

	Pkt.
Barbatus (Sweet William). See page 117.	
Latifolius atrococcineus fl.-pl. Hardy perennial. A hybrid between the China Pink and Sweet William. The heads of brilliant red flowers are quite double. Will flower first season from seed	$0 25
Plumarius, Double Mixed. Fringed, fragrant flowers of white, crimson, or purple shades, spotted and variegated. Height, 1 foot	10
Plumarius, Single Mixed. Large, fragrant flowers of beautiful colors and finely fringed	10
Scotch, or **Florists' Pinks.** Excellent perennial garden plants, about 1 foot high when in bloom. They are vigorous, very hardy, and flower profusely during spring and early summer. The flowers are very large, very double, beautifully fringed, and emit a grateful clover-like perfume. Mixed colors	25

California Poppies

(Eschscholtzia)

New and Rare Varieties

THE visitor to California during Poppy season is greatly impressed with the beauty and richness of coloring created by these, perhaps the easiest grown, most striking and free-flowering of annuals. They bloom early, and, where the weather remains cool, continue until frost. The plants are particularly adapted for beds or borders. They are dwarf in habit, spreading, and the lovely flowers are carried well above the finely divided green foliage. The Santa Barbara Poppy (*Hunnemannia fumariæfolia*), considered by many as one of our prettiest annuals, is sometimes called *Bush Eschscholtzia* or *Giant Yellow Tulip Poppy*. The plant is upright and the flowers are of a rich golden yellow, frequently measuring 3 to 4 inches across, and borne erect on stiff stems. They keep quite some time in water after cutting. Their blooming season lasts from July until cut down by frost. Sow seed early in April, and in order to avoid having the plants too dense, mix the seed before sowing with ten times its bulk of sharp builders' sand; cover seed just slightly, and thin plants out to stand 3 to 4 inches apart.

1 Carmine King. Beautiful shade of carmine-rose.

2 Golden West. Bright yellow, dark orange at base of petals.

3 Scarlet Beauty. Deep scarlet inside, lighter on outside of petals.

4 Geisha. Rich golden orange inside, orange-scarlet outside—very striking contrast.

5 Vesuvius. Rich coppery red which glistens in the sunlight.

6 Santa Barbara Poppy (*Hunnemannia fumariæfolia*). Rich golden yellow.

Each, pkt. 10 cts., ¼oz. 50 cts., oz. $1.50

COLLECTION

Pkt. each of above 6 varieties, 50c.; ¼oz. each of above 6 varieties, $2.50

HELICHRYSUM (Straw Flower)

THIS is, undoubtedly, the most popular of the Everlasting Flowers. Their twofold purpose suggests their more general cultivation. The newer and improved varieties offered are very attractive when grown in beds in the garden, and they keep well as cut flowers. When dried, their rich, bright colorings are valuable for winter decorations. Plants grow readily from seed sown in the open ground when the trees are starting out in leaf, and in order to give them ample space for maximum development, thin out to leave at least 1 foot between the plants. The blooms that are desired for winter decoration should be cut with as long stems as possible when they are about one-third open, then, after the foliage is stripped from the stem, tied in bunches and hung, flowers downward, in some dark, cool, dry place until cured.

1 **Rose Queen.** Bright rose.
2 **Snowball.** White.
3 **Salmon Queen.** Soft salmon.
4 **Golden Ball.** Rich golden yellow.
5 **Fireball.** Richest crimson.
6 **Violet Queen.** Pleasing shade of violet.

Each, pkt. 15 cts., ¼oz. 50 cts., oz. $1.50

COLLECTION. Pkt. each of above 6 fine varieties, 50 cts. ¼oz. each of above 6 fine varieties, $2.50

DIASCIA

Barberæ. An old and not so frequently grown annual which we have inserted here in the Specialties in an endeavor to give it a wider acquaintance with flower-lovers. The plants average 9 to 12 inches in height and the dainty spurred flowers are freely produced in sprays on wiry stems. The flowers are ⅛inch in diameter and of a soft salmon-rose. **Pkt. 25 cts., 5 pkts. $1.**

DIDISCUS

(Queen Anne's Lace Flower)

Cærulea. This pretty annual, which was cultivated extensively in the gardens of our grandparents, has been brought to prominence again. Florist shops throughout the country now display it, and its lovely, refined appearance and color make an instant appeal. Few flowers are as lovely for decorating the dinner table. Queen Anne's Lace Flower grows into an upright, very much-branched plant about 2 feet high. Each branch ends in an umbel of sky-blue flowers, which spread out in an umbrella-like fashion, crowning each shoot with a beautiful and delicate head of flowers. Each individual bloom in the umbel is carried on a thin and long tube, giving the flower-heads a distinct and refined appearance. The name Queen Anne's Lace Flower is most appropriately applied to the flowers since the graceful form of the umbels of bloom resemble in their quaint and artistic arrangement, the most delicate and dainty lace. It is easily grown and a splendid cut flower, lasting unusually long in water. Seed may be sown outdoors in a well-prepared seed-bed when trees are out in leaf; water copiously during hot weather. **Pkt. 25 cts., 5 pkts. $1.**

Dolichos (Hyacinth Bean)

Dimorphotheca (African Golden Daisy)

DIGITALIS (Foxglove)

This ornamental hardy plant is used extensively for naturalizing in shrubbery borders and along the edges of woods. It grows well under almost all conditions, giving a wealth of bloom during June and July.

Gloxiniæflora. This is an improved strain of the ordinary Foxglove, *D. purpurea*, with handsome spotted Gloxinia-like flowers on long spikes.

Alba. White ground. **Rosea.** Rose ground. **Mixed.**
Purpurea. Purple ground. **Lutea.** Yellow ground.

Each, pkt. 10 cts., ¼oz. 50 cts.

Monstrosa (Mammoth Foxglove). Long spikes surmounted by one enormous flower; all colors mixed. Pkt. 15 cts., ¼oz. $1.

DIMORPHOTHECA (African Golden Daisy)

This is by far one of the best introductions in recent years. The plants are of branching habit, growing about 15 inches high and the flowers are a rich golden orange with a dark center. Being an annual, it is easily cultivated and will give a magnificent display all summer. Very highly recommended.

	Pkt.	¼oz.
Aurantiaca. Golden orange	$0 10	$0 50
Aurantiaca hybrida. Beautiful new hybrids of the African Golden Daisy and similar in habit to the parent. The flowers are equally as large, but vary in color from the purest white through the various shades of yellow and orange to rich salmon shades, many being zoned with several of these colors around the black disc	10	50

DOLICHOS (Hyacinth Bean)

A rapid-growing annual climber, flowering freely in erect racemes, followed by ornamental seed-pods. Fine for covering arbors, trellises, etc. Sow the seed in the garden in beds where it is to remain. Height 10 feet.

	Pkt.	Oz.
Daylight. This grand Hyacinth Bean comes from Japan. In our trial-grounds, plants from seed sown late in May had, by the middle of July, attained a height of over 10 feet, and were covered with spikes of snow-white, pea-shaped blossoms from then until late fall. The heart-shaped foliage is bright green and not affected by insect pests	$0 10	$0 50
Darkness. Identical in every way with the above, except in color, which is a rich purple-violet	10	50
Lablab, Mixed	10	40

ESCHSCHOLTZIA

(California Poppy)

Profuse-blooming annuals, for beds, edging or masses. Bloom from early summer to frost. We offer below a choice list of what we consider the finest varieties in commerce.

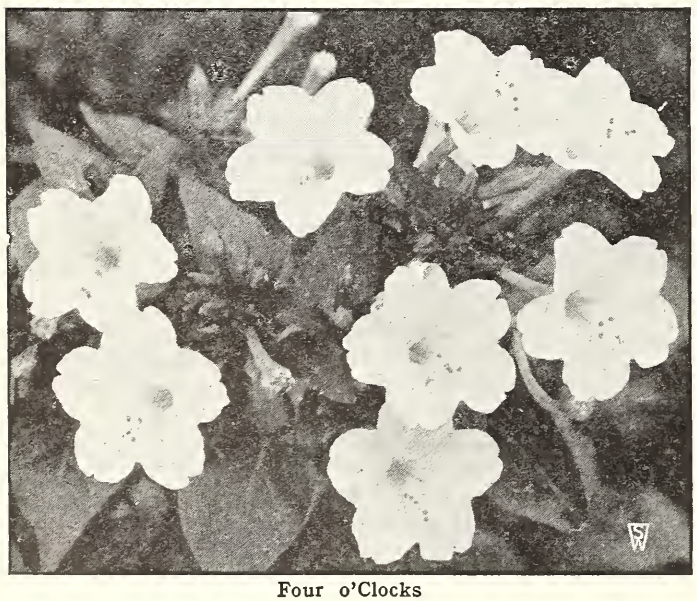
	Pkt.	¼oz.
Ballet Girl. Outside of petals intense cochineal-carmine, inside of petals creamy white; beautifully frilled and fluted	$0 20	$1 50
Carmine King. Beautiful shade of carmine-rose	10	50
Chrome Queen. An entirely new and distinct tone of rich chrome-yellow	10	50
Fringed Yellow. A deep pure yellow, the petals deeply cut and fringed	10	50
Geisha. Rich golden orange inside, orange-scarlet outside—very striking contrast	10	50
Golden West. Bright yellow, dark orange at the base of the petals	10	50
Lovely. A lovely tone of bright rose-pink suffused with salmon. The blooms have a satiny appearance which adds very much to the effect	20	1 50
Purple Glow. Undoubtedly the greatest advance that has been made in Eschscholtzias. It is a bright reddish purple, the darkest shade that has been obtained so far	20	1 50
Scarlet Beauty. Petals deep scarlet inside, lighter on outside	$0 10	$0 50
Tango. Bronzy red overlaid with terra cotta	10	50
Vesuvius. Rich coppery red which glistens in the sunlight	10	50
S. & W. Co.'s Choice Mixture. We have prepared a mixture of named sorts covering all the beautiful colors in this pretty annual	10	50

EUPATORIUM (Thoroughwort)

Strong-growing, hardy perennials, well suited for naturalizing and deserving of a place in every hardy border. They will grow and thrive in any location.

Ageratoides. A very useful variety, growing 3 to 4 feet high, with dense heads of minute white flowers from August to October. Pkt. 10 cts.

Fraseri. A very pretty dwarf variety, producing clusters of snow-white flowers, fine for cutting and bouquets. 1½ feet. Pkt. 10 cts



Four o'Clocks

Euphorbia variegata

ECHINOPS (Globe Thistle)

Ruthenicus. Striking hardy perennial plants, with handsome, silvery, thistle-like foliage and fine steel-blue flowers in round heads, which can be used for cutting. Excellent for the back of the hardy border among other tall plants. Height, 3 to 5 feet. Pkt. 10c.

ECHINOCYSTIS

(Wild Cucumber Vine)

Lobata. One of the quickest-growing annual vines we know of; splendid for covering trellises, old trees, fences, etc. Clean, bright green foliage and sprays of white flowers during July and August. Pkt. 10 cts., oz. 40 cts.

ERYNGIUM (Sea Holly)

Amethystinum. Handsome, ornamental hardy plants, growing 2 to 3 feet high, with finely cut, spiny foliage and beautiful, thistle-like heads of amethystine blue; fine for winter bouquets. Pkt. 15 cts.

EUPHORBIA

Strong-growing annuals, suitable for beds of tall-growing plants or mixed borders. The flowers are inconspicuous; the foliage, however, is exceedingly ornamental.

Variegata (Snow-on-the-Mountain). Attractive foliage, veined and margined with white. 2 feet. Pkt. 10 cts., ¼oz. 25 cts.

Heterophylla (Annual Poinsettia). An annual which resembles in color the beautiful hot house poinsettia. The plants grow 2 to 3 feet high, of branching, bush-like form, with smooth, glossy green leaves which about the middle of the summer, turn to a beautiful orange-scarlet, presenting a striking and brilliant appearance. Pkt. 15 cts., 2 pkts. 25 cts.

FEVERFEW. See Matricaria.

FORGET-ME-NOT. See Myosotis.

FOUR O'CLOCK

(Mirabilis)

Well-known, free-flowering plants. Called Four o'Clock because they open their blossoms at that hour in the afternoon; also called Marvel of Peru. Hardy annuals. 2 feet.

Fine Mixed. All colors. Pkt. 10 cts., oz. 30 cts.

Types of Gaillardia

GAILLARDIA (Blanket Flower)

ANNUAL VARIETIES

Very showy annuals of easy culture. The flowers are borne freely and are brilliant in tone. Excellent for borders and do best if sown in May. Flower in great profusion from July to November.

	Pkt.	¼oz.
Ambyodon. Rich blood-red. 2 feet	$0 10	$0 50
Aurea. Rich yellow. 2 feet	10	50

Picta Lorenziana. A mixture of various colors. The flowers are double and excellent in form. Pkt. 10 cts., ¼oz. 50 cts.

The Bride. This is a pure white selection from the Lorenziana type; very double and, like the variety mentioned above, is excellent for cutting. Pkt. 15 cts., 2 pkts. 25 cts.

PERENNIAL VARIETIES

The perennial varieties of this family are grown in most hardy borders. They thrive in any position or soil, require little or no protection, and take care of themselves. If sown early, they begin flowering in July, and continue to be a mass of bloom until cut down by frost; fine for cutting. Height 2 feet.

Kermesina splendens. Center rich crimson, narrow canary-yellow border. Pkt. 15 cts.

Grandiflora compacta. A compact variety forming bushy plants 12 to 15 inches high, and bearing its long-stemmed flowers well above the foliage. In coloring the flowers are as brilliant and varied as the tall-growing sorts. Pkt. 15 cts., 2 pkts. 25 cts.

Grandiflora, Copper-Red. A striking new color in this popular perennial. Pkt. 15 cts., 2 pkts. 25c.

S. & W. Co.'s Hybrids

This strain of Hybrid Gaillardia has been obtained from a specialist who has developed a splendid type, covering only the best varieties. The flowers are as large as sunflowers. **Pkt. 25 cts., 5 pkts. $1.**

GEUM (Avens)

Atrosanguineum fl.-pl. Beautiful hardy perennial, bearing profusely large, showy, double, dark-crimson flowers all through the summer; an elegant flower for bouquets... Pkt. ¼oz. 50 cts. $0 10

Mrs. Bradshaw. Large double brilliant orange scarlet; in flower throughout the entire summer..... 15

GLOXINIA

These very remarkable Gloxinias have, by careful selection, now been so far fixed that 40 per cent of the seedlings come true. The ground-color of the large, erect, and widely opened flowers is a velvety purple-crimson, with a rosy white throat. On the often seven-lobed corolla appear more or less sharply defined bands, spots and stripes, characteristic of this new class, the latter mostly of a violet hue. Pkt. 50 cts.

Globe Amaranth (Gomphrena)

GLOBE AMARANTH

(Gomphrena)

Popularly known as "Bachelor's Button." A first-rate bedding plant. The flowers resemble clover heads and can be dried and used in winter bouquets. Cornflowers and a number of other flowers are also known as Bachelor's Buttons, and in ordering it is well to order by name to prevent errors. We offer them in separate colors and in a mixture as well.

Rose **Purple**
White **Mixed**

Each, pkt. 10 cts., oz. 75 cts.

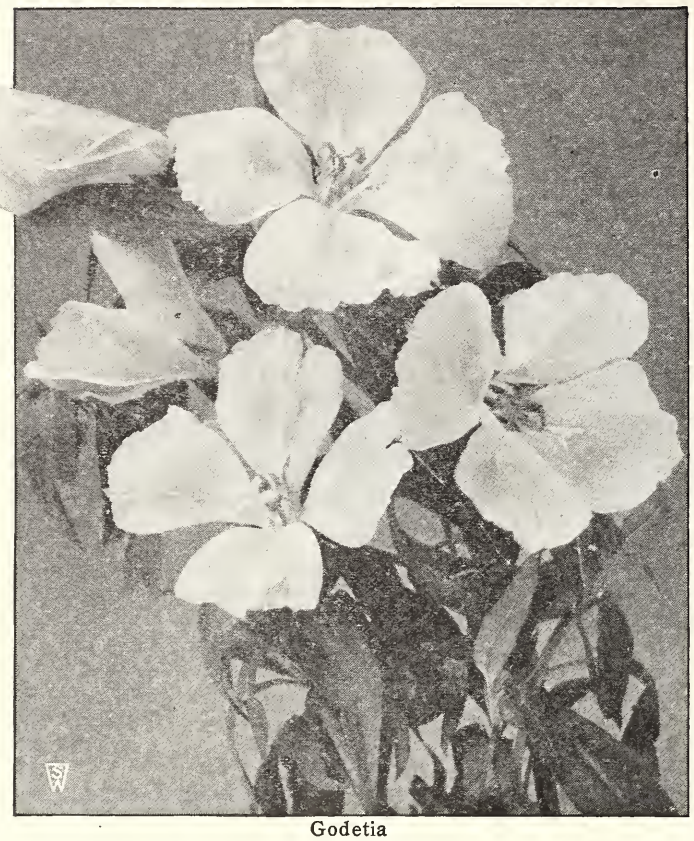
GNAPHALIUM

(Edelweiss)

Leontopodium. Seed should be sown early and kept cool and moist. Pkt. 25 cts.

EVERLASTING FLOWERS

We give a complete list of the best varieties of this splendid class of flowers on page 119.



Godetia

GODETIA

This beautiful hardy annual deserves more extensive cultivation. The plants bloom profusely and are splendid for bedding. We also recommend that those with greenhouse facilities try growing these as a pot-plant for winter decoration. We offer the single-flowering sorts, which grow about 1 foot high, and the double varieties, which attain the height of 2 feet.

	Pkt.	¼oz.
Duchess of Albany. Satiny white	$0 10	$0 50
Lady Satin Rose. Brilliant carmine	10	50
Princess of Wales. Beautiful pink	10	50
Sunset. Dwarf; compact; rosy carmine	10	50
Tall Double Pink. Beautiful salmon-pink. 5 pkts. $1.	25	
Tall Double Rose. Deep rose. 5 pkts. $1.	25	
Tall Double Carmine. Carmine. 5 pkts. $1.	25	
Tall Double Crimson. Crimson. 5 pkts. $1.	25	
Tall Double Mauve. Mauve. 5 pkts. $1.	25	

GOURDS

A vigorous class of plants, with curiously formed and often strangely colored fruits. The foliage is abundant and often curious.

	Pkt.
Mock Orange	$0 10
Apple-shaped	10
Dish-Cloth, or **Chinese Luffa**	10
Dipper	10
Hercules' Club	10
Mixed. All sorts	10

GREVILLEA (Silk Oak)

Robusta. Very graceful foliage; highly valued as a decorative plant for the table, and, when large, for tropical effects. 3 to 5 feet. Pkt. 15 cts.

HELENIUM (Sneezewort)

Hardy perennial; blooms in late summer; useful in the hardy border; very free-blooming.

	Pkt.
Bigelowii. Height 5 feet. Golden yellow, black center	$0 25
Hoopesii. 2½ feet. Dark yellow	15

GYPSOPHILA (Baby's Breath)

Pretty, free-flowering, elegant plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut-flowers.

	Pkt.	Oz.
Elegans grandiflora alba. This is an improved, large-flowering, pure white form of the annual Baby's Breath; of free, easy growth, and grown by the acre in the suburbs of Paris and London for use with other cut-flowers. Several sowings should be made during the season to keep up a supply	$0 10	$0 50
Elegans grandiflora rosea. Delicate rose	10	50
Muralis. An annual sort which forms mounds of green 8 to 10 inches high, thickly studded with little pink flowers from early in the season till frost; fine for edging	10	1 00
Paniculata. White flowers; fine for bouquets; one of the favorite hardy perennials; blooms first year if sown early. 2 feet	10	1 00
Paniculata fl.-pl. The new double-flowering Baby's Breath, and one of the finest hardy plants for cutting. 5 pkts. $1.	25	
Acutifolia. A strong-growing hardy perennial sort, 3 to 4 feet high, with large panicles of small white flowers in July	10	75
Repens. Dwarf; white. A hardy perennial sort for rockwork	10	1 50

HELIOPSIS

Pitcheriana (Orange Sunflower). Hardy perennial. A valuable plant for the border, thriving in any good soil. Flowers cup-shaped, deep yellow, on long, stiff stems for cutting. 3 to 4 feet. June to October. Pkt. 10 cts., ¼oz. 50 cts.

HEUCHERA

Sanguinea (Alum Root). Beautiful hardy perennial. The foliage is evergreen; flowers fiery coral-red shading to brilliant crimson. Pkt. 25 cts., ¼oz. $1.50.

Splendens. Deep red. Pkt. 25 cts., ¼oz. $1.50.

Gypsophila elegans grandiflora, White

HELIANTHUS (Sunflower)

Much-prized annuals and perennials for cutting; the tall sorts are largely used in the perennial border; the dwarf sorts make good edgings to the tall.

ANNUAL SUNFLOWERS

The annual sorts of Sunflowers are indispensable for cutting. Sown in a sunny location in April or early May, they come to bloom early in the summer and flower continuously until cut down by frost.

	Pkt.	¼oz.
Cut-and-Come-Again, Mixed. A mixture of the tall-growing, large-flowering types for cutting	$0 10	$0 50
Cucumerifolius (Miniature Sunflower). Small, single, rich yellow flowers; an abundant bloomer. 4 feet	10	30
Cucumerifolius, Stella. Different from the above by its larger and better-formed flowers of purest golden yellow with black center	10	35
Cucumerifolius, Orion. A new variety of the Stella. The petals are twisted like a cactus dahlia	10	35
Cucumerifolius, Perkeo. A charming dwarf variety of the Miniature Sunflower. The plants form compact bushes about 12 inches high by 14 inches through. There are many positions, such as the front of borders or beds of plants of medium height, where this can be used to good advantage flowering as it does from the end of June until cut down by hard frost	Pkt. $0 10	¼ oz. $0 35
Cucumerifolius fl.-pl. The double-flowering form of the popular Miniature Sunflower. The flowers, while double, are quite free and graceful; of a bright golden yellow	15	50
Dwarf Double (Globe of Gold). Dwarf; double; yellow. 4 feet	10	35
Globosus fistulosus (Globe or Dahlia Sunflower). Flowers large, double and of a rich saffron. 6 feet	10	30

Gigantic Russian. The large-flowering Russian variety. Oz. 10 cts., ¼lb. 25 cts., ½lb. 40 cts., lb. 75 cts.

HARDY SUNFLOWERS

	Pkt.	¼oz.
Missouricus. Fine; double; yellow	$0 25	$2 00
Rigidus. Heavy, stiff stems; clear yellow flowers	25	
Perennial Sorts, Mixed. A mixture of the best perennial varieties carefully selected	25	

HELICHRYSUM (Straw Flower). See **Everlastings,** page 119.

Sunflowers

Heliotrope, Lemoine's Giant

HELIOTROPE

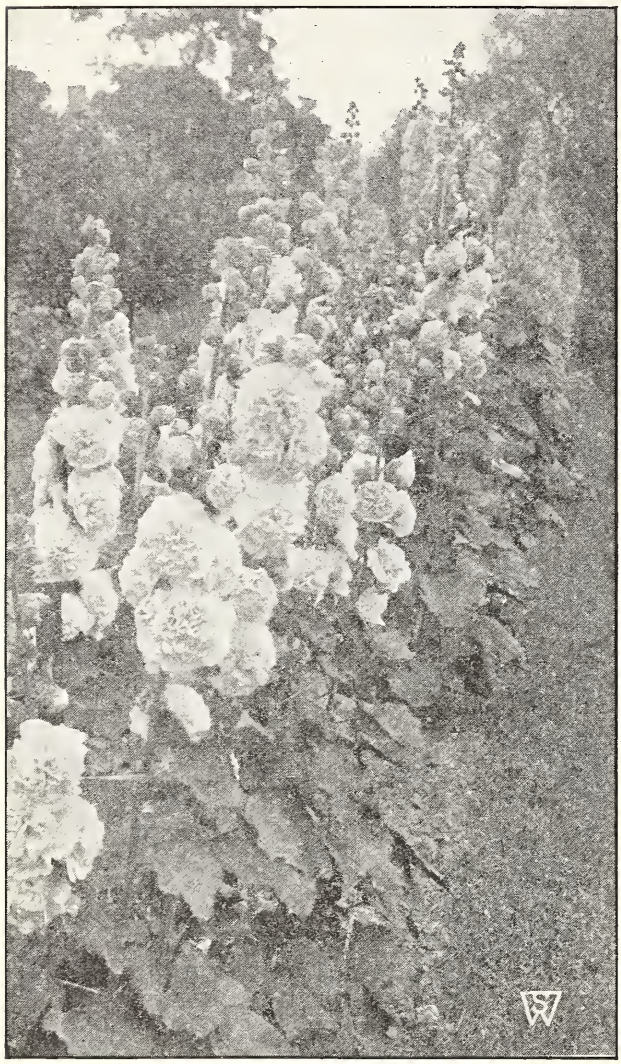
A half-hardy perennial, flowering during the whole season. Its delightful perfume makes it a most desirable bouquet flower. A splendid bedding plant, or can be trained as a greenhouse climber. Seed started indoors in the spring will make fine plants for summer blooming. Can also be sown outdoors in May.

	Pkt.	¼oz.
Lemoine's Giant. Of robust growth and produces heads of flowers double the size of the old sorts; mixed colors	$0 10	$1 00
Queen Marguerite. Large; dark blue	15	1 50
White Lady. Largest white	10	1 00
Mixed. All colors of the regular type	10	75

HIBISCUS (Marshmallow)

Showy, ornamental plants, for mixed beds or shrubbery borders. Hardy perennial, but will bloom first year from seed if sown early.

	Pkt.
Palustris. Large pink flowers	$0 10
Moscheutos (Swamp Rose Mallow). Flowers 6 inches in diameter; of light rosy red, with dark center	10
Golden Bowl. Giant yellow, cup-shaped flowers, from 6 to 9 inches in diameter; of rich cream, with velvety maroon center. The plants commence to bloom early and continue until cut down by frost	10
Crimson Eye. Fine for borders and groups; color white, with crimson center; flowers very large	10



Chater's Superb Double Hollyhocks

HOLLYHOCKS

One of the most popular of hardy garden plants. The beautiful color effects produced by the planting of these flowers, combined with their dignified and stately appearance, render them indispensable for either the old-fashioned garden or the well-planned herbaceous border. As a background for other flowers or planting among shrubbery, they are without an equal. As the plants are affected with rust occasionally, we recommend frequent spraying in springtime with bordeaux mixture.

CHATER'S SUPERB DOUBLE

By special arrangement, we have secured seed from a grower in England who has, at great expense and effort, grown seed of the famous Chater's Hollyhock on the ground where the **original strain** was first grown, and we can offer the true strain in the following colors:

Cerise	**Crimson**	**Flesh-color**
Lilac	**Pink**	**Primrose**
Scarlet	**White**	**Yellow**
	Mixed	

Each, pkt. 25 cts., 5 pkts. $1

CHATER'S SUPERB SINGLE

Many prefer the single-flowering Hollyhocks, and we have arranged to procure the same well-known strain in the following single varieties:

Pink	**Purple**	**Primrose**
Scarlet	**White**	**Yellow**
	Mixed	

Each, pkt. 25 cts., 5 pkts. $1

S. & W. Co.'s Superb Double. This is a selected strain from another grower, which we can offer in a mixture only. The selection has been made, however, with great care. **Mixed, pkt. 10 cts., ⅛oz. 50 cts.**

HUMULUS

Japan Hop

A rapid summer climber which in three to four weeks' time attains a height of 20 to 30 feet, resembling the common Hop, but, being an annual, attains full perfection the first season. The foliage is luxuriant, making a dense covering. It is one of the best plants for covering verandas, trellises, etc., producing grateful shade and being very ornamental. Heat, drought and insects do not trouble it.

	Pkt.	¼oz.	½oz.	Oz.
Japonicus	$0 10	$0 30	$0 50	$0 75
Variegatus. Variegated variety	10	50	75	1 25

HONESTY (Moonwort)

Hardy biennial, admired for its silvery seed-pouches, which are used for house ornaments; beautiful and curious purple flowers. Sow seed in open in May and protect over winter. 2 feet. **Pkt. 10 cts., ¼oz. 50 cts.**

HUNNEMANNIA

(Giant Yellow Tulip Poppy; Bush Eschscholtzia)

Fumariæfolia. This is by far the best of the Poppy family for cutting, remaining in good condition for several days. Seed sown early in May will, by the middle of July, produce plants covered with their large, buttercup-yellow, Poppy-like] blossoms, and never out of flower until hard frost. The plants grow about 2 feet high, are quite bushy, with beautiful, feathery, glaucous foliage. Pkt. 10 cts., ½oz. 60 cts., oz. $1.

IBERIS. See Candytuft.

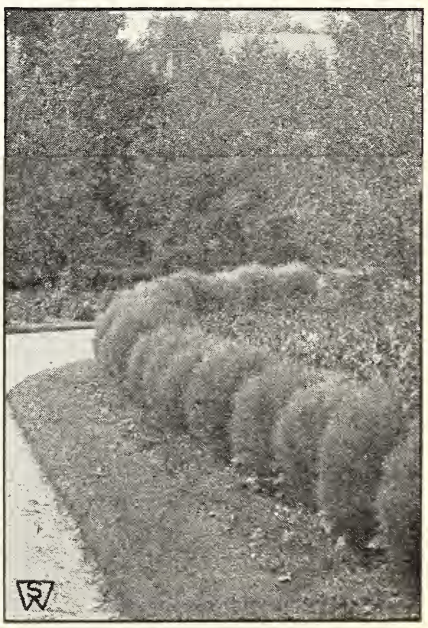
IMPATIENS

Sultani. One of the most beautiful of decorative plants. It thrives in stove heat, greenhouse and in open border during the summer. The flowers are of a brilliant rosy scarlet, 1½ inches in diameter. Mixed. Pkt. 10 cts.

Impatiens Holstii. A very handsome plant from East Africa, forming bushes 1½ to 2 feet in height, with brilliant scarlet flowers, which measure from 1¼ to 1½ inches across. It is an elegant pot-plant, also valuable for bedding out in partial shade. **Pkt. 25 cts.**

INCARVILLEA

Delavayi. Hardy perennial. Rather new; originated in northern China, and is one of the prettiest perennials known. It produces divided pale green leaves about 2 feet in length, much like acanthus. The flowers are borne on long, stout stems, tube-shaped, and appear almost like gloxinias. Color bright rose. 2½ feet. June to August. Pkt. 50 cts.



Kochia trichophylla (see page 93)

IPOMŒA

Climbers of rapid growth, with beautiful and varied flowers. For covering walls, trellises, arbors, or stumps of trees they are invaluable. It is well to soak the seed in warm water over night to assist in germination.

Bona-nox (Evening-Glory). Rosy lilac flowers, expanding in the evening; of very rapid growth. Pkt. 10 cts., oz. 75 cts.

Grandiflora mexicana alba (Moonflower). At night and during dull days the plants are covered with an abundance of large, pure white, fragrant flowers, 5 to 6 inches in diameter. It grows rapidly and will cover a large surface. Pkt. 10c., oz. 75c.

Hederacea grandiflora superba. Sky-blue, margined white. Pkt. 10c., oz. 75c.

Hederacea grandiflora superba alba. White. Pkt. 10 cts., oz. 75 cts.

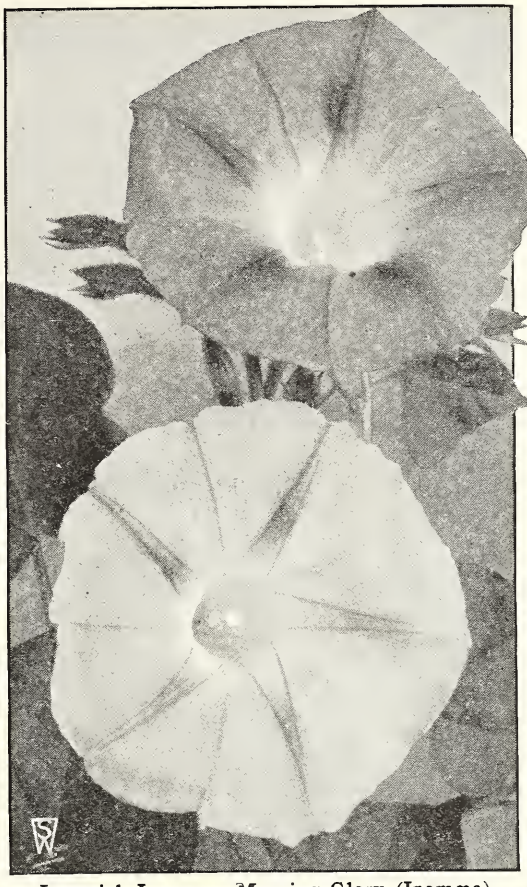
Leari. Dark blue. Pkt. 10 cts., oz. $1.50.

Rubra cærulea (Heavenly Blue). Immense flowers of bright sky blue, very beautiful. Pkt. 15 cts., 2 pkts. 25 cts.

Setosa (Brazilian Morning-Glory). Flowers of pleasing rose-color, borne very freely, in large clusters, from August to frost. As a quick-growing vine it has no equal, covering an enormous space in a short time. Pkt. 10 cts., oz. $1.

Mixed Imperial Japanese (Emperor Morning-Glory). These are beyond question the handsomest of all Morning-Glories. Of the easiest culture; can be sown in the open ground in a sunny situation when the weather has become warm and settled. They soon cover a large area, and even before flowering are decidedly interesting on account of the varied forms of the foliage and their markings. The flowers are of gigantic size and their colorings beyond description. The self or solid colors range from snow-white to black-purple, with all the possible intermediate shades; there is also an endless number having flowers spotted, marbled, striped, flaked, splashed, etc. Pkt. 10 cts., oz. 50 cts.

For other varieties of Ipomœas, see Cypress Vine and Convolvulus



Imperial Japanese Morning-Glory (Ipomœa)

Kochia (Summer Cypress; Mexican Firebush)

TRICHOPHYLLA. A pretty half-hardy annual, 2 to 3 feet in height, which grows into a perfect pyramidal-shaped cypress bush, with small, feathery, light green foliage, deepening as the season advances until it becomes a lovely crimson hue about September. Excellent for edging or hedging. Pkt. 10 cts., ¼oz. 25 cts.

KUDZU VINE. See **Pueraria.**

LANTANA

One of the most desirable half-hardy greenhouse or bedding plants, which bloom constantly. The flowers are borne in Verbena-like heads of orange, white, rose, etc. Mixed colors, pkt. 10c., ¼oz. 50c.

LATHYRUS (Everlasting or Hardy Sweet Pea)

Hardy climbers, growing 6 to 8 feet high when trained on a trellis. The flowers are borne in large clusters. They are peculiarly adapted to rough places, to scramble over rocks and bushes; splendid cut-flower.

White. Pkt. 10 cts.
Delicata. Rosy flesh-color. Pkt. 10 cts.
Red. Pkt. 10 cts.
Mixed Colors. Pkt. 10 cts.

LAVATERA (Annual Mallow)

Trimestris grandiflora rosea. A very beautiful and showy annual, growing about 2 feet high and covered during the entire summer with large, cup-shaped salmon-pink flowers; for beds or borders they are very effective. Sow seed in May where they are to bloom and later thin the plants out to 1 foot apart. Pkt. 10c., ¼oz. 50c.

LAVENDER

Lavandula vera. Well-known, hardy perennials; sweet-scented; should be grown extensively in mixed borders. Height 3 feet. Pkt. 10 cts., ¼oz. 50 cts.

ANNUAL LARKSPURS

These are among the best-known garden flowers, and in recent years a vast improvement has been effected by careful selection in size and color of the blossoms and the general habit of the plant. Seeds sown in the open ground before the close of April will produce flowering plants by the beginning of July, and give a continuous succession of flowers from then until frost, a record that is not surpassed by any other annual. They make handsome beds or lines, and their free, graceful habit and bright colors are very effective when interspersed in the old-fashioned flower or shrubbery border. They stand well when cut, and a vase of one or mixed colors is indeed charming.

DOUBLE STOCK-FLOWERED

This is the finest variety of this very popular annual, with beautiful double flowers. Height 2½ to 3 feet.

Snowstorm. Pure white.
Stella. Sky-blue.
Loveliness. Shell-pink.
Attraction. Bright rose.
King of the Blues. Dark blue.
Violet Queen. Violet.
Lilac Perfection. Lilac.
Tricolor. Variegated.
Exquisite. Soft pink; very beautiful.

Defiance. A decided improvement over the Newport Scarlet. This Larkspur is of the same habit as our Double Stock-flowered; the plants, however, are a trifle taller in growth.

Each, pkt. 15 cts., ¼oz. 50 cts., oz. $1.50

Tall Stock-flowered, Mixed. A select mixture of our famous Stock-flowered strain. Pkt. 10 cts., oz. 75 cts.

Dwarf Stock-flowered, Mixed. Finest double flowers. Mixed. 1½ to 2 feet. Pkt. 10 cts., oz. 75 cts.

S. & W. Co.'s Emperor

This grand type of Annual Larkspurs grows about 2 feet high and is of candelabra habit. When planted in borders of the flower-garden the plants will prove most effective.

Apple-Blossom
Brilliant Rose
Black-Blue
Azure-Blue
Violet
White, Striped
Dark Red
Rose
Tricolor
Light Blue

Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.

COLLECTION: One pkt. each of the above 10 varieties, 75 cts.

LEPTOSYNE

Stillmani. Rich golden yellow flowers on long stems; will bloom in six weeks. Pkt. 15 cts.

LIATRIS (Blazing Star; Gay Feather)

A very attractive, native, hardy perennial. The purple and rosy purple flowers are borne on long spikes. Excellent for cutting. 3 to 4 feet. July to September. Mixed varieties, pkt. 10 cts.

LINARIA

Cymbalaria (Kenilworth Ivy). Lavender and purple. A charming, neat, hardy perennial trailing plant, suitable for baskets, vases, pots, or rockeries. Pkt. 15 cts., 2 pkts. 25 cts.

LINUM (Flax)

Grandiflorum rubrum (Scarlet Flax). One of the most effective and showy hardy annuals; bedding plants, of long duration, having fine foliage and delicate stems, with brilliant scarlet-crimson flowers. Height 1 foot. Pkt. 10 cts., ¼oz. 25 cts.

Perenne. Bright blue. Height 1½ feet. Pkt. 10 cts., ¼oz. 35 cts.

Lupinus polyphyllus roseus

LOBELIA

These bloom very quickly from seed and flower all through the season. For beds, edgings, baskets, and pots there is nothing prettier. Sow outdoors in early spring, where the plants are to grow, and thin moderately; or transplant several inches apart in rich, open soil. Some stimulant given when they are in bloom greatly improves the flowers. Almost all are also good winter conservatory plants of trailing habit. The perennial or tall varieties are handsome, showy plants and will be found quite effective for backgrounds and grouping.

	Pkt.	¼oz.
Barnard's Perpetual. Deep blue with white eye; trailing	$0 10	$1 00
Crystal Palace Compacta. Rich deep blue; dark foliage. The finest variety for bedding	10	2 00
Emperor William. A very compact variety with sky-blue flowers	10	1 50
Lindleyana. Rose, with white eye; trailing	10	1 00
Pumila splendens. Dark blue, with clear white eye; compact	10	1 50
Pumila alba. Pure white	10	1 50
Speciosa. Dark blue; dark foliage; extra fine; trailing	10	1 00

HARDY VARIETIES

Tall-growing, hardy perennials with long spikes of brilliant flowers, unrivaled for permanent beds and borders. 2 to 4 feet.

	Pkt.
Cardinalis (Cardinal Flower). Scarlet. ¼oz. $3	$0 25
Cardinalis lugdunensis. Rose	50
Queen Victoria. Brilliant scarlet	50

LUPINUS (Lupine)

This very interesting class of plants is of easy culture and produces beautiful leaves and pea-shaped flowers. It should be more generally cultivated. The following annual varieties may be sown out in the open in May and as plants grow, thin out, leaving about 1 foot between the plants.

ANNUAL VARIETIES

Rich Blue **White** **Rose**

Each, pkt. 10 cts., oz. 50 cts.

S. & W. Co.'s Finest Mixture. A splendid mixture of the Annual Lupines for cutting. **Pkt. 10 cts., oz. 40 cts.**

PERENNIAL VARIETIES

	Pkt.	Oz.
Polyphyllus, White	$0 10	$0 75
Polyphyllus, Blue	10	75
Polyphyllus, Mixed	10	75

Lupinus polyphyllus roseus. The plants of this beautiful half-hardy perennial are of robust, branching habit. An excellent subject for the herbaceous border, flowers being produced in long spikes of soft rose-pink. **Pkt. 15 cts., ¼oz. 35 cts., oz. $1.**

Lupinus polyphyllus, Excelsior. This fine strain of perennial Lupines will be found a grand addition to the hardy perennial section, embracing, as it does, a splendid assortment of colors, ranging from very pale to deep rose, and various shades of lavender, mauve and blues. A really fine mixture. **Pkt. 15 cts., 2 pkts. 25 cts.**

LYCHNIS

Handsome hardy perennial plants of easy culture, for massing in beds or borders, blooming first year from seed if sown early.

	Pkt.	¼oz.
Chalcedonica. Fine scarlet flowers. 2 feet	$0 10	$0 50
Haageana. Brilliant orange, scarlet, and crimson in mixture	10	50
Lagascæ. Rose; very dwarf; fine for pots	25	
Sieboldii. White	10	50
Viscaria splendens. Bright rosy red, very showy. 1 foot	10	50

MARIGOLD

The African and French Marigolds are old favorite free-flowering annuals of easy culture; both are extremely effective. The former have uniformly large, yellow or orange-colored flowers, and are well adapted for large beds or mixed borders; the latter are dwarfer in growth, with beautifully striped flowers, and are better suited for bedding purposes and for pot culture. They succeed best in a light soil, with full exposure to the sun. A vase or bowl of any of the rich yellow sorts in combination with a few blue larkspurs or cornflowers is very striking.

DOUBLE AFRICAN

Giant Show Lemon. This highly meritorious strain of the African Marigold is grown specially for us by a specialist in Europe who selects only the finest blooms and plants of unusually good constitution for seeding purposes. Height 2½ feet. **Pkt. 25 cts., ¼oz. $1.**

Giant Show Orange. The darker form of the preceding variety. Height 2½ feet. **Pkt. 25 cts., ¼oz. $1.**

Eldorado. Flowers very large, imbricated, and extremely double, in all shades of yellow. Pkt. 10 cts., ¼oz. 40 cts.

Lemon Quilled. Deep, double, lemon-yellow flowers, daintily quilled. Pkt. 10 cts., ¼oz. 50 cts.

Orange Quilled. Similar to the above but orange-yellow. Pkt. 10 cts., ¼oz. 50c.

DWARF FRENCH MARIGOLDS

Few annuals are as effective as the French Marigold, or bloom for as long a period. They form compact bushes not over 1 foot high, and are unequaled for borders or beds.

Brunea. Double, quilled flowers of rich brown with a narrow thread-like edge of yellow.

Gold-striped. Double; golden yellow flowers, each petal striped brownish red.

Gold-edged Brown. Double golden yellow flowers, narrow margin of velvety brown.

Golden Ball. Double, pure golden yellow.

Legion of Honor (Little Brownie). A charming single-flowering Marigold forming dense, compact bushes about 9 inches high. They begin to bloom in June and continue until frost. The flowers are golden yellow marked with a large blotch of velvety crimson at the base of each petal.

Lemon Ball. Double lemon-yellow flowers.

Mahogany. Double, rich velvety mahogany-brown blooms.

Each, pkt. 25 cts., ¼oz. $1

African and French Marigold

AFRICAN GIANT SHOW LEMON

AFRICAN GIANT SHOW ORANGE

DWARF SINGLE FRENCH LITTLE BROWNIE

WE have illustrated three of the most popular varieties of this splendid annual in color. The African Giant Show Lemon and Orange Marigold are the exact size obtained from plants grown from our strain of seed this year. For a number of years we have offered this strain as being superior to anything we had previously been able to obtain.

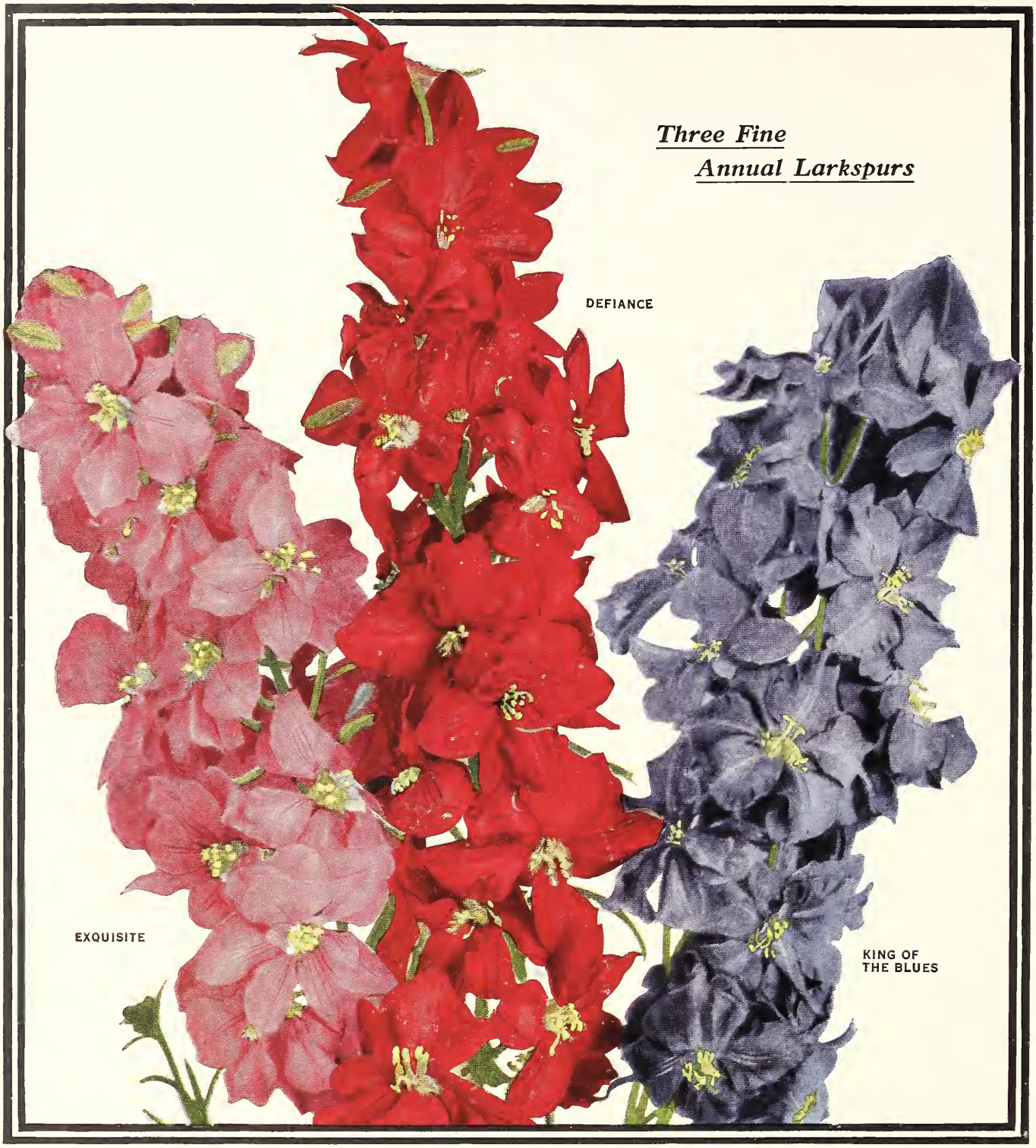
Seed is saved only from plants of proved types. We are making a special offer of the two African varieties, Giant Show Lemon and Orange, the plants of which attain the height of 3 feet, and four varieties of the Dwarf French Marigolds, which are very effective when used for beds or borders, forming dense bushes about 1 foot high. Seed of all these varieties may be sown, when danger of frost is past, where they are to bloom; thin out African varieties to stand 1½ feet apart, the French sorts 6 inches apart.

SIX FINE VARIETIES

Dwarf French, Little Brownie. Single. Golden yellow, large spot of velvety crimson.
Dwarf French, Golden Ball. Double. Pure golden yellow.
Dwarf French, Lemon Ball. Double. Pure lemon-yellow.
Dwarf French Mahogany. Double. Rich velvety mahogany-brown.
Giant Show Lemon. Large; double; lemon-yellow.
Giant Show Orange. Large; double; orange-yellow.

Each, pkt. 25 cts., ¼oz. $1.00

COLLECTION: One pkt. each of above 6 varieties . $1.00
¼oz. each of above 6 varieties . . 5.00



ANNUAL LARKSPURS

FEW annuals are more satisfactory for garden display or for cutting than the Larkspur. Plant-breeders have produced wonderful improvements in size and color and the varieties we are offering are a distinct advance in habit of growth, size of spikes and color to any strains we have tried in comparison. Seed sown in the open ground in April will produce plants which will bloom continuously from July to frost. They are splendid for beds or borders, their graceful habit and bright colors making them very effective.

TEN FINE VARIETIES

Attraction. Bright rose.
Defiance. Scarlet
Exquisite. Soft pink.
King of the Blues. Dark blue.
Lilac Perfection. Lilac.
Loveliness. Shell-pink.
Snowstorm. Pure white.
Stella. Sky-blue.
Tricolor. Variegated.
Violet Queen. Violet.

Each, pkt. 15 cts., ¼oz. 50 cts., oz. $1.50

COLLECTION. Pkt. each of above 10 varieties, $1; ¼oz. each of above 10 varieties, $4

MATRICARIA (Feverfew)

Grandiflora fl.-pl. eximia. Half-hardy perennial, which should be treated as an annual. Double, pure white flowers are borne on slender stems 15 inches high, which are excellent for cutting. Pkt. 10 cts., ¼oz. 50 cts., oz. $1.50.

Golden Ball. Compact-growing variety with golden yellow flowers. Excellent for bedding. 1 foot. Pkt. 25 cts., ¼oz. $1.

MALVA

	Pkt.	¼oz.	Oz.
Alcea (Hollyhock Mallow). Pink	$0 10	$0 50	$1 50
Moschata	10	50	1 50
Moschata flore-albo	10	50	1 50

MATTHIOLA

Evening-scented Stock

Bicornis. This old-fashioned annual has no beauty to recommend it, the flowers being a dull purplish lilac, but it is well worth growing for the entrancing fragrance which it emits during the evening. 1 ft. Pkt. 10 cts., ¼oz. 50 cts.

MAURANDIA

Rapid-growing, half-hardy perennial climbers that can be treated as annuals. Fine for garden or greenhouse; bloom all summer in hanging-baskets and vases or on trellises. 10 feet.

	Pkt.	¼oz.
Barclayana. Blue	$0 10	$1 00
Barclayana alba. White	10	2 00

MESEMBRYANTHEMUM

Crystallinum (Ice Plant). Dwarf, trailing annual plants; flowers white. Prized for its singular icy foliage. Pkt. 10 cts.

MIGNONETTE (Reseda)

Well-known little hardy annual plants, with sweet-scented flowers, at home everywhere, either in the greenhouse, garden or sitting-room.

S. & W. Co.'s Triumph. One of the choicest varieties for winter forcing. In type similar to Allen's Defiance, except that spikes are more compact and the individual florets are much larger in size. Seed of this grand variety is grown in our greenhouses, and is saved from the best spikes. **Pkt. 50 cts.**

Allen's Defiance. This gorgeous Mignonette has qualities heretofore unknown in large-flowering varieties, being deliciously fragrant. When grown under favorable conditions and with proper care, its spikes will be from 12 to 15 inches long. The individual florets are of remarkable size and stand out boldly, forming a graceful as well as compact spike. Its remarkable strength is accompanied by extraordinary keeping qualities; the spikes have been kept in a vase three weeks after cutting, retaining their grace and fragrance until every bud opened. Pkt. 10 cts., ¼oz. 50 cts.

Improved Large-flowering. Pkt. 10 cts., ¼oz. 25 cts.

Matricaria (Feverfew)

S. & W. Co.'s Triumph Mignonette

Golden Queen. Yellow-tinted flowers. Pkt. 10 cts., ¼oz. 25 cts.

Miles' Spiral. Very fine. Pkt. 10 cts., ¼oz. 25 cts.

Machet. A dwarf French variety, with broad spikes of very fragrant red flowers; one of the best varieties for either garden or pot culture. Pkt. 10 cts., ¼oz. 50 cts.

Machet, Ruby. A fine new Machet Mignonette, with coppery scarlet flowers. Pkt. 10 cts., ¼oz. 50 cts.

Odorata maxima, Goliath. Bears very large flowers, the center spikes being often 8 inches long. The plant grows in candelabra form and produces fiery red flowers on firm, upright stalks. Pkt. 10 cts., ¼oz 50 cts..

MIMOSA (Sensitive Plant)

	Pkt.
Pudica. A very curious plant. The leaves instantly close up when touched. Tender annual.	$0 10

MIMULUS (Musk Plant)

Moschatus. The plants of Mimulus are beautiful and tender-looking, with almost transparent branches. They luxuriate in damp, shady situations; musk-scented. Tender annual. 1 foot..	10
Splendid Mixed	10

Myosotis, Ruth Fischer (Forget-me-not)

MYOSOTIS (Forget-me-not)

Few spring flowers are more admired than the lovely Forget-me-not, which is especially effective for mass planting. It is perennial and hardy if given slight protection through the winter. Seed may be sown any time from spring until mid-summer. The Alpestris varieties and Dissitiflora come into bloom in April, with the spring-flowering bulbs, etc. The Palustris sorts do not bloom till May, but continue till fall.

	Pkt.	¼oz.
Alpestris, Royal Blue. Rich indigo-blue flowers. The finest and most effective dark blue variety; grows about 9 inches high	$0 10	$0 75
Alpestris robusta grandiflora. A strong, sturdy grower attaining a height of about 10 inches with good heads of clear Forget-me-not-blue flowers	10	75
Alpestris, Victoria. A favorite variety with fine heads of clear azure-blue flowers; plants bushy and compact. Makes a fine edging for beds	15	1 50
Alpestris, Mixed. A select mixture of the above	10	50
Dissitiflora. Of dwarf, compact habit with sprays of large, exquisite blue flowers, especially adapted for beds of late-flowering tulips, etc.	15	2 00
Palustris semperflorens. An ever-blooming variety beginning to flower in May and continuing until autumn. Large, clear blue flowers in pretty sprays	15	2 00
Ruth Fischer. The latest and said to be the finest and largest-flowered Forget-me-not yet sent out, producing flowers up to ½inch in diameter, of true Forget-me-not-blue. Plants of strong, vigorous growth, of exceptional value for pot culture and spring bedding. 5 pkts. $1	25	

NEMOPHILA

Splendid annuals for garden decoration; bright-colored flowers, in shades of blue, white, and violet. 1 foot.

Finest Mixed. Pkt. 10 cts.

NICOTIANA

Affinis. An annual with sweet-scented, pure white, star-shaped flowers, 3 inches across, blooming continually. 2 to 3 feet. Pkt. 10 cts., ¼oz. 25 cts.

Giant Red-flowered. Magnificent annual of tropical effect, large, luxuriant leaves and immense clusters of rich crimson flowers. 5 feet. Pkt. 10 cts.

Sanderæ Hybrids. A splendid new type in a great variety of colors. Pkt. 10 cts., ¼oz. 50 cts.

NIGELLA

	Pkt.	¼oz.
Damascena, Double Mixed (Love-in-a-Mist). Pretty garden annuals with feathery green foliage, in which large, double, charming blue or white flowers are set. 1 to 2 feet	$0 10	$0 30
Miss Jekyll. A lovely variety with cornflower-blue blossoms; splendid for cutting. Hardy annual. About 2 feet	10	50

MOMORDICA (Balsam Apple; Balsam Pear)

Luxuriant annual climbers, with large leaves, making dense shade. The flowers are followed by ornamental, large fruits of orange or copper color, which burst and expose an interior of red, which is highly effective. 15 to 20 feet.

Balsamina (Balsam Apple). Orange fruits. Pkt. 10 cts., oz. 75 cts.

Charantia (Balsam Pear). Coppery scarlet fruits. Pkt. 10 cts., oz. 75 cts.

MUSA (Abyssinian Banana Tree)

Ensete. A foliage plant of magnificent proportions; for sub-tropical massing, or as single specimens it is strikingly effective. Seeds sown early in the house will produce plants 10 to 15 feet high the first season. Pkt. 25 cts.

NEMESIA

We are pleased to offer a splendid strain of this beautiful half-hardy annual, principally the large-flowered varieties and one of the dwarf, compact sorts.

S. & W. Co.'s Orange. Rich orange.
S. & W. Co.'s Rose. Rich rose.
S. & W. Co.'s Scarlet. Scarlet.
S. & W. Co.'s Mixed. Rich mixture of all the lovely colors that come in this class of plants.
S. & W. Co.'s Hybrid Blue Gem. A dwarf variety, very suitable for borders.

Each, pkt. 25 cts., 5 pkts. $1.

ŒNOTHERA

	Pkt.	¼oz.
Fraseri (Evening Primrose). Hardy perennial border plants of value. Beautiful yellow flowers. July to October. 1½ feet	$0 25	$1 50
Lamarckiana. Hardy perennial. Enormous yellow flowers. July to October. 3 feet	10	50

Nigella, Miss Jekyll

Stumpp & Walter Co.'s Superb Nasturtiums

Few garden annuals respond with as little care as the Nasturtium. For ease of culture, duration of bloom, brilliancy of coloring and general excellence, they are unexcelled. All they need is a moderately good soil, in a well-drained, sunny position, and from within a few weeks from the time they are sown until hard frost comes there is an endless profusion of their gorgeous blossoms. The varieties offered below were selected, after exhaustive trials, from a very large number of sorts as being the best and most distinct.

NEW GIANT-FLOWERING

We have arranged with a grower, who has made growing Nasturtiums a specialty, to grow this Giant-flowering strain for us. The plants are strong and vigorous, with very large, bright green leaves, measuring from 5 to 8 inches across. The flowers, which are very numerous, measure 3 inches in diameter, and are borne on long stems well above the foliage. They are exquisitely formed, with overlapping, crinkled petals. They are produced in great numbers and have a most striking effect. Their fine color, long stems, great size and esthetic form make them valuable for cutting. We can offer it only in selected mixtures of both the Dwarf Bedding and the Tall Climbing kinds.

Giant Tall, Mixed. Pkt. 15 cts., oz. 25 cts., ¼lb. 75 cts., lb. $2.
Giant Dwarf, Mixed. Pkt. 15 cts., oz. 25 cts., ¼lb. 75 cts., lb. $2.

S. & W. Co.'s Giant-flowering Nasturtiums

TOM THUMB DWARF OR BEDDING

Aurora. Salmon-rose.
Beauty. Light scarlet, mottled yellow.
Brilliant. Rich scarlet.
Chameleon. Various colors on one plant.
Crystal Palace Gem. Sulphur, maroon-blotches.
Empress of India. Brilliant crimson; dark foliage.
King Theodore. Deep crimson-maroon; dark foliage.
King of Tom Thumbs. Dark scarlet; dark foliage.
Lady Bird. Orange-yellow, spotted red.
Luteum. Pure, light yellow.
Pearl. Pure white.
Ruby King. Light ruby-red.

Price of any of the above named Dwarf sorts, pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts.

Special Collections: **1 pkt. each of 6 of these varieties, 50 cts. 1 pkt. each of 12 of these varieties, $1.**

Dwarf, Mixed. A mixture of above-named sorts. Pkt. 10 cts., oz. 15 cts., ¼lb. 50 cts.

Dwarf, Ivy-leaved. Beautiful, dark green, ivy-like foliage, composing into an effective setting for the lovely flowers of various colors. **Mixed Colors. Pkt. 10 cts., oz. 20 cts., ¼lb. 75 cts.**

Dwarf, Variegated-leaved. These comparatively new varieties are equally thrifty and robust in growth and produce freely as beautiful flowers in various colors as the plain green-leaved Nasturtiums, with the added merit of ornamental foliage, which renders them beautiful objects even out of flower. We offer in a mixture of best colors. **Pkt. 10c., oz. 20c., ¼lb. 75 cts.**

TALL OR CLIMBING VARIETIES

Elegant and luxuriant climbers for verandas, trellises, etc. May be used to cover unsightly railings and to trail over rough ground with fine effect. The seed-pods can be gathered while green and tender for pickling; 6 to 10 feet.

Chameleon. Differently rich-colored flowers on the same plant.
Crimson. Rich and velvety.
Dunnett's Orange. Rich golden orange, garnet blotches.
King Theodore. Deep crimson-maroon, dark foliage.
Pearl. Creamy white.
Prince Henry. Cream, spotted and tipped scarlet.
Rose. A lovely shade of ruby-rose.
Scarlet. Glowing vermilion.
Yellow. Pure yellow. Pkt. 10 cts., oz. 20 cts., ¼lb. 60 cts.
Tall Mixed. A mixture of the above-named sorts. Pkt. 10 cts., oz. 15 cts., ¼lb. 50 cts.
Jupiter. Magnificent flowers of a brilliant golden yellow. Pkt. 10 cts., oz. 20 cts., ¼lb. 75 cts.
Moonlight. Immense, creamy white flowers. Pkt. 10 cts., oz. 20 cts., ¼lb. 75 cts.
Sunlight. Pure, rich butter-yellow; frequently measuring 3 inches across. Pkt. 10 cts., oz. 20 cts., ¼lb. 75 cts.

Special Collections: **1 pkt. each of 6 named varieties, 50 cts. 1 pkt. each of 12 named varieties, $1.**

Tall, Ivy-leaved. Similar in type to the Dwarf Ivy-leaved in Tall varieties. **Mixed Colors. Pkt. 10 cts., oz. 20 cts., ¼lb. 75 cts.**

Tall, Variegated-leaved. Similar in type to the Dwarf Variegated-leaved, in Tall-growing sorts. **Mixed Colors. Pkt. 10 cts., oz. 20 cts., ¼lb. 75 cts.**

STUMPP & WALTER CO.'S GIANT PANSIES

This very popular annual needs little description. Good results may be obtained from sowing seed in April in a light, cool, but well-moistened soil, enriched with a slight amount of barnyard manure or fine ground bone. Sow seed in drills, covering them five times their diameter, and firm soil. Water once a day, except in very dry weather, when they may be watered twice a day. Seed will germinate in about two weeks and should not be allowed to dry out. A small covering of newspapers will prevent drying out. When plants are large enough to handle, transplant to a distance of 1 foot apart. Where greenhouse and coldframe facilities are at hand, sow in July or August and protect plants during winter.

S. & W. CO.'S GIANT PANSIES

Pansies in Mixture

Our Pansy Mixtures are prepared in our Flower Seed Department by an expert who has a thorough knowledge of the finest sorts extant, and is done in a very careful manner. Our Pansies have been grown throughout the United States, by leading florists, many of whom have repeated their order every year, thereby giving their unqualified indorsement to our famous strain.

S. & W. Co.'s Exhibition Strain.

This mixture of Giant Pansies has been prepared of the finest varieties grown; blooms of gigantic size, splendid texture; the plants of robust constitution hold their majestic blooms well above the foliage. Every conceivable color and combination of colors has been included. Pkt. 25 cts., ¼oz. $3, oz. $10.

Non Plus Ultra. A mixture of Pansies designed for the critical buyer who desires his beds to look of uniform quality, giving every conceivable color and combination of colors that exists in this highly meritorious flower. Pkt. 20 cts., ¼oz. $2, oz. $7.50.

Masterpiece (**Frilled Pansy**). A remarkable type, each petal being conspicuously curled or waved. The color range is quite extensive, the rich, dark, velvety shades predominating. Pkt. 25 cts., ¼oz. $2, oz. $7.50.

Cassier's Giant. A grand mixture of the finest blotched varieties; very large in size and rich in coloring. Pkt. 20 cts., ¼oz. $2, oz. $7.50.

Mme. Perret. A new and beautiful strain, originated with a French specialist; flowers of large size, borne very freely in a great diversity of colors, especially rich in red and wine shades. Pkt. 20 cts., ¼oz. $2, oz. $7.50.

S. & W. Co.'s Special Mixed. Pkt. 10 cts., ¼oz. $1, oz. $3.50.

Finest English Mixed. Pkt. 10 cts., ¼oz. 75 cts., oz. $2.50.

Giant Pansies in Separate Colors

	Pkt.	¼oz.	Oz.
Giant Adonis. Soft lavender-blue	$0 15	$1 50	$5 00
Giant Azure-Blue	15	1 50	5 00
Giant Dark Blue. Deep blue	15	1 50	5 00
Giant Fire King. Mahogany and gold	15	1 25	4 00
Giant King of the Blacks. Black	15	1 50	5 00
Giant Lord Beaconsfield. Violet-blue	$0 15	$1 50	$5 00
Giant Purple	15	1 50	5 00
Giant Snow-White	15	1 25	4 00
Giant White. Dark eye	15	1 50	5 00
Giant Pure Golden Yellow	15	1 50	5 00
Giant Yellow. Dark eye	15	1 50	5 00

PETUNIA

The Petunia cannot be equaled by any plant for outdoor decoration. They will flower the first season, even if sown in the open ground but usually not before June. These sown in the house or hotbed in April will bloom in June and be larger and finer plants. Half-hardy annual.

S. & W. Co.'s Giant-flowering Petunias. The demand for a mixture comprising the best representative types of single-flowering Petunias has been so significant that we have by careful selection and elimination prepared a special mixture. Where a mixture of the giant single fringed and plain-edged varieties are desired, as well as an assortment of the various colors and shades, our customers will find them **for bedding purposes the finest procurable. Pkt. 25 cts., 5 pkts. $1.**

GIANT-FLOWERING FRINGED PETUNIAS

SINGLE VARIETIES

Under this heading we have listed the finest possible varieties of the now popular large-flowering Fringed Petunias. Whether desired for bedding, cutting or general display, the varieties listed are the best by test of the Fimbriata, or fringed large-flowering class.

	Pkt.
Single Fringed White. Pure glistening white	$0 25
" " **Yellow.** Canary-yellow	25
" " **Rose.** Brilliant rose	25
" " **Crimson.** Dazzling crimson	25

Single Fringed Mixed. A mixture of best fringed varieties including with the above many new colors and shades. Should be grown by everyone desiring the best. Pkt. 25 cts.

DOUBLE VARIETIES

It has been a well-established fact that seed saved from the most carefully hybridized flowers produces a small percentage of double-flowering plants. It is important to save the weaker seedlings, as these invariably produce the finest double flowers.

	Pkt.
Double Fringed White	$0 50
" " **Rose**	50
" " **Crimson**	50

Double Fringed Mixed. A superb mixture of the finest double-fringed varieties. Pkt. 50 cts.

SINGLE BEDDING VARIETIES

	Pkt.
Balcony Blue. A splendid free-flowering type, either for bedding or window-boxes, vases, hanging-baskets, etc. Flowers average 3 inches across and are of a rich indigo-blue	$0 25
Balcony Rose. Brilliant rose-pink	25
Balcony Red. Bright red	25
Crimson. Beautiful and effective compact variety	15
Julius Wolff. Similar to Snow Queen, except in color which is light blue	25
Rosy Morn. Soft carmine-pink, white center	15
Rose of Heaven. Similar to Rosy Morn but more brilliant	25
Snowball. An excellent, compact variety, producing pure satiny white flowers throughout the entire season; very dwarf	15
Snow Queen. Pure white sort, not quite as compact as Snowball	25
Howard's Star. Rich crimson with distinct white star in the center	15
Countess of Ellesmere. Dark rose with fine white throat	10
Inimitable compacta. Bushy little plants covered with pretty striped and star-shaped flowers	10
Special Bedding, Mixed. Select, bright colors ¼oz. 40c	10

S. & W. CO.'S GIANT-FLOWERING PETUNIAS

Pentstemon

PHLOX DRUMMONDII (Hardy Annual)

One of our best annuals, flowering freely all the summer. For richness of color they cannot be surpassed. They are invaluable for beds and ribbon-gardening, therefore no garden should be without them. They should be sown outdoors in May, in a situation well open to the sun, and they will flower and be a mass of color in July and continue until late autumn. Seeds may be sown in a hotbed in March and flowers be had in June.

Large-flowering Tall Varieties

This is the finest type, having the largest heads of bloom as well as the largest individual flowers; of strong, sturdy growth, attaining a height of about 15 inches.

	Pkt.	¼oz.
Brilliant. Finest crimson	$0 10	$0 75
Carmine. Carmine with white eye	10	75
Chamois-Rose. Shell-pink	15	1 00
Isabelliana. Tea-rose-yellow	15	1 00
Kermesina. Scarlet-striped	10	75
Leopoldii. Rose with white eye	15	1 00
Purple. Deep purple	10	75
Purple King. Purple, white eye	10	75
Rosea. Enchantress-pink	10	75
Scarlet. Rich scarlet	10	75
Splendens. Deep crimson, white eye	10	75
White. Pure white	10	75
Finest Tall Mixed	10	60

Imported Collection. **6 of one pkt. each of above varieties $0 50**

One pkt. each of above 12 varieties 1 00

Large-flowering Dwarf Varieties

This type resembles the tall sorts offered ins ize of blooms but the plants are dwarfer in habit.

	Pkt.	¼oz.
Chamois-Rose. Shell-pink	$0 10	$1 25
Defiance. Brilliant crimson	10	1 25
Fireball. Scarlet	10	1 25
Purple	10	1 25
Snowball. Pure white	10	1 25
Surprise. Vermilion, white center	10	1 25
Finest Dwarf Mixed	10	60

IMPORTED COLLECTION. One pkt. each of above 6 varieties, 50 cts.

Star of Quedlinburg. Dwarf; star-shaped flowers; a novel variety. **Mixed colors, pkt. 10 cts., ¼oz. 75 cts.**

HARDY PHLOX

	Pkt.
Large-flowering Hybrids, Tall Mixed	$0 15
Large-flowering Hybrids, Dwarf Mixed	15
Large-flowering Red Shades, Mixed	25

PASSION FLOWER

Handsome, rapid-growing perennial climber for greenhouse decoration or sunny positions in the open ground in summer.

	Pkt.
Cærulea. Large flowers of violet and blue	$0 15
Alba. Large, white flowers	15

PHYSALIS (Chinese Lantern Plant)

Franchetii. Hardy perennial forming dense bushes about 2 feet high, producing bright orange-scarlet lantern-like fruits. May be had in flower first year from seed if sown early; the fruits are often displayed in florist shops and are very interesting, and of splendid decorative value. Pkt. 25 cts., 5 pkts. $1.

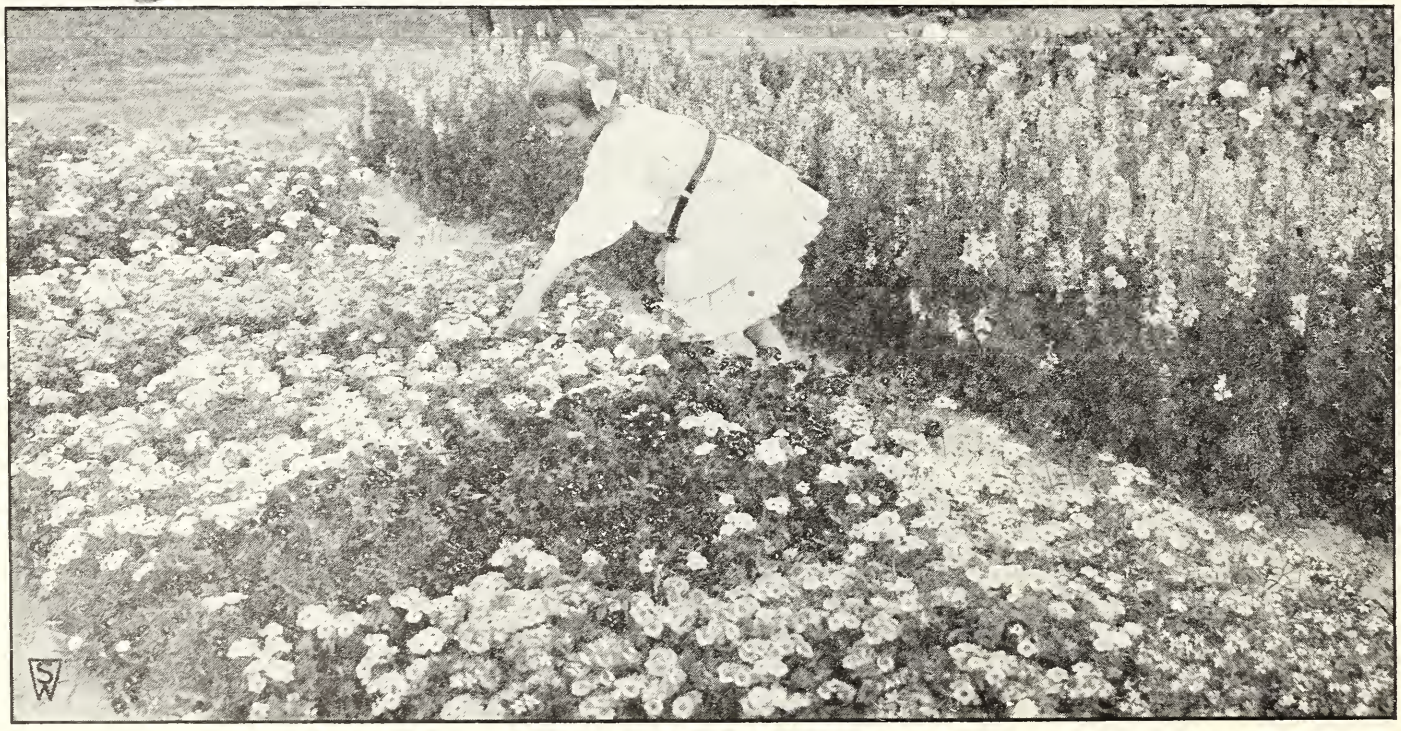
PENTSTEMON (Beard Tongue)

Highly useful and attractive hardy perennial, and much used in the hardy border.

S. & W. Co.'s Giant-flowered Hybrids, Mixed. This is a mixture of the finest giant-flowering varieties and a very excellent assortment of colors. **Pkt. 25 cts., 5 pkts. $1.**

S. & W. Co.'s Pink Strain. A very pleasing strain of pink and pale rose shades. Pkt. 25 cts., 5 pkts. $1.

Sensation. As a bedding plant this takes rank with the petunia, phlox, etc. It grows about 2 feet high, every branch being a spike of large, gloxinia-like flowers in a very wide range of bright colors, including rose, red, carmine, cherry, pink, lilac, purple, etc. Not quite hardy, and best treated like petunias, verbenas, salvia, etc. Pkt. 15 cts., 2 pkts. 25 cts.



Phlox Drummondii in foreground

Physostegia

PHYSOSTEGIA (False Dragonhead)

Virginica. One of the prettiest hardy perennials, forming dense bushes, 3 to 4 feet high, and bearing freely during the summer months spikes of delicate lilac tubular flowers not unlike a gigantic heather. Pkt. 10 cts.

PLATYCODON

Balloon Flower; Japanese Bellflower

One of the best hardy perennials, producing very showy flowers during the whole season. They form large clumps and are excellent for planting in permanent borders or among shrubbery. Easily raised from seed; begin blooming in August if sown outdoors in April.

	Pkt.	¼oz.
Grandiflorum. Large steel-blue flowers	$0 10	$0 75
Grandiflorum album. Pure white variety	10	75
Grandiflorum Mariesii. Large, open, bell-shaped flowers of a rich, violet-blue; plant dwarf and compact	10	75
Grandiflorum japonicum fl.-pl. (Double Japanese Bellflower). Large, glossy, deep blue flowers. The inner petals alternate with the outer ones, giving the flower the appearance of a ten-pointed blue star..2 pkts. 25c.	15	

POLEMONIUM

Jacob's Ladder

Popular hardy perennial border plant, with bell-shaped flowers nearly 1 inch across. 2 feet. May to July. Pkt. 10 cts.

Cæruleum grandiflorum. Deep blue. Pkt. 10 cts., ¼oz. 50 cts.

Cæruleum album. Pure white. Pkt. 10 cts., ¼oz. 50 cts.

Richardsonii. Sky-blue. Pkt. 10 cts., ¼oz. 50 cts.

POLYANTHUS

Primula elatior

Showy, free-flowering plants for either pot or outdoor culture.

Giant Polyanthus. We offer an improved strain of this beautiful plant. For complete description see page 64. Pkt. 25 cts., 5 pkts. $1.

PORTULACA

Sun Plant

One of our finest annual plants, of easy culture, thriving best in a rather rich, light loam or sandy soil, and luxuriating in an exposed sunny situation. The flowers are of the richest colors and are produced throughout the summer in great profusion. Fine for massing in beds, edgings on rockwork, and frequently used to sow broadcast over sunny banks, etc. In any case, it is well to mix the seed with three or four times its bulk of dry sand or soil, which permits of even and easy distribution. 6 inches.

Portulaca

SINGLE GRANDIFLORA

	Pkt.	¼oz.
Alba. Pure white	$0 10	$0 50
Aurea. Deep golden yellow	10	50
Rosea. Beautiful rose	10	50
Splendens. Crimson	$0 10	$0 50
Finest Mixed	10	40

DOUBLE GRANDIFLORA

	Pkt.	¼oz.
Alba. White	$0 10	$1 50
Rosea. Rose	10	1 50
Salmonea. Salmon	10	1 50
Splendens. Crimson	$0 10	$1 50
Sulphurea. Yellow	10	1 50
Finest Mixed	10	1 25

PUERARIA THUNBERGIANA

Japanese Kudzu Vine

To this must be awarded first place as the fastest-growing hardy climbing plant. It will grow 8 to 10 feet the first year from seed, and after it has become established there seems to be no limit to its growth, 50 feet in a single season being not unusual. Its foliage is large and covers well. It bears small racemes of rosy purple, pea-shaped blossoms toward the close of August. A splendid subject for permanently covering verandas, dead trees, etc. Pkt. 10 cts., ¼oz. 30 cts.

Platycodon grandiflorum japonicum fl.-pl.

POPPIES

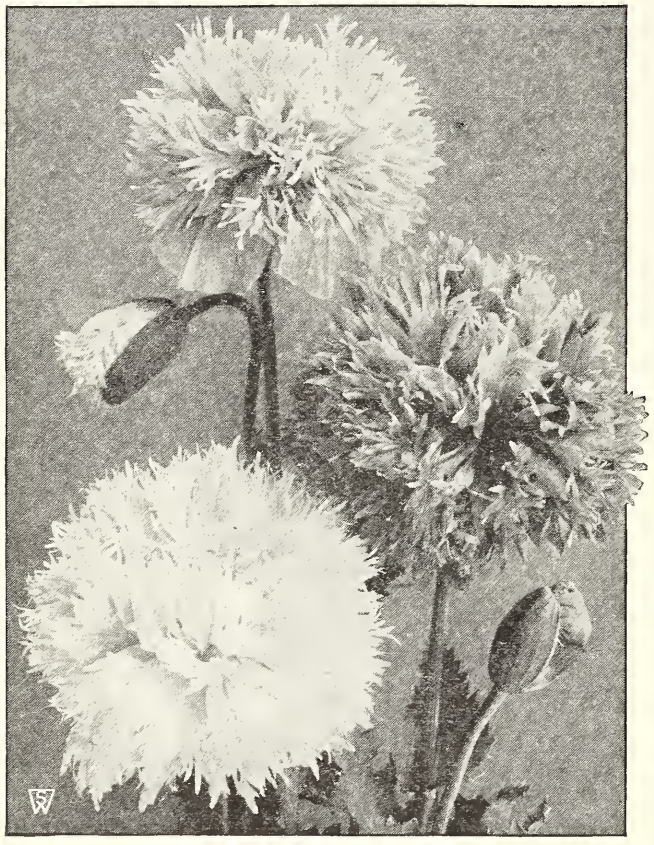
Annual Poppies should be sown as early as possible in the spring where they are to remain, as they do not transplant readily. It is advisable to mix the seed with builders' sand, using about twenty-five times as much sand as seed, and then carefully broadcast seed in on the surface of the ground and firm well. Plants should be thinned out to stand about 4 inches apart for best results. Seed may be sown in rows also and in succession up to the middle of May. It is advisable to pick flowers just as they are expanding as they last longer; removing the old blooms from plants will help lengthen the flowering season.

Single Annual Varieties

Shirley, Carmine Shades. A selection of all the shades of carmine.
Shirley, Rose Shades. A selection of rose-color shades.
Shirley, Salmon Shades. A selection of salmon shades.
Shirley, White Shades. A selection of white shades.
Shirley, Wild Rose. One of the finest varieties of the Shirley, the flowers of which are best described as a pure wild-rose-pink.
Shirley, Mixed. We have prepared a mixture of these beautiful annual Poppies to cover all the shades mentioned above, as well as the deeper shades of scarlet to rich crimson.

Each, pkt. 10 cts., ¼oz. 50 cts., oz. $1.50

	Pkt.	¼oz.
Admiral. A single peony-flowered variety of surpassing beauty, having large, smooth-edged flowers of glistening white, with a broad band of brilliant scarlet around the top	$0 10	$0 40
Charles Darwin. Remarkable for the unique color of its large, smooth-edged flowers, being a striking rich dark purple, with a velvety black spot at the base of each petal	10	35
Dainty Lady. Immense flowers 4 to 5 inches across, of a charming shade of rosy mauve, with a large dark metallic blotch at the base of each petal	10	35
Danebrog (Danish Cross). Very showy variety, producing large flowers of brilliant scarlet, with a silvery white spot on each petal, forming a white cross	10	25
King Edward. A new variety of gorgeous coloring, being a deep scarlet, shaded crimson-red, each petal marked with a large black blotch for half its length from the base, against which the yellow anthers stand out in bold relief. The plant grows 2½ feet high, and produces its very large flowers with great freedom	10	35



Carnation-flowered Poppies

SINGLE ANNUAL POPPIES, continued

	Pkt.	¼oz.
English Scarlet (Flanders). The common scarlet Field Poppy of Europe	$0 10	$0 25
Tulip Poppy (*Papaver glaucum*). One of the most brilliant; the flowers are 3 inches across and closely resemble the brilliant scarlet Gesneriana tulip	10	50

Double Annual Varieties

The Double Annual Poppies require the same cultural treatment as the Shirley. They are excellent to grow for cutting. For best results plants should be thinned out to stand 8 inches apart.

	Pkt.	¼oz.
American Flag. Beautiful variety; flowers very large and double, snow-white, bordered with scarlet	$0 10	$0 25
Fairy Blush. Very double flowers of pure white, elegantly fringed and tipped with rose	10	25
Golden Gate. Comprising an infinite variety of semi-double and double flowers in the greatest variety of colors	10	25
Mikado (Striped Japanese Poppy). This beautiful Poppy is very distinct in character and color. The flowers are brilliant scarlet and white, with elegantly curved petals, like a Japanese chrysanthemum	10	25
White Swan. Immense double flowers, beautifully fringed and of purest white, of the same dwarf habit as Cardinal and Shell-Pink	10	25
Cardinal. A splendid dwarf variety of the carnation-flowered type, growing about 2 feet high and bearing large, globular, fringed flowers of an intense cardinal-red	10	25
Shell-Pink. Similar in every way to Cardinal and White Swan, except color, which is a soft seashell- or chamois-pink. Very dainty	10	25
Carnation-flowered. Splendid double, fringed flowers. (See cut.)		
Mixed colors	10	1 00
Peony-flowered. Large, showy, double globular flowers, resembling a double Peony		
Mixed Colors	10	20

Hardy Perennial Varieties

Too much cannot be said of this class of Poppies, as for general effectiveness and brilliancy of display they are unequaled.

ICELAND POPPIES (*Papaver nudicaule*)

The Iceland Poppy, while considered a perennial, will flower the first year from seed. They are of graceful habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks about 12 inches high, bearing their brilliant flowers in endless profusion. Most useful for cutting, for which purpose pick when in bud.

	Pkt.	¼oz.
Iceland (Nudicaule) Scarlet	$0 15	$1 00
Iceland (Nudicaule) White	15	1 00
Iceland (Nudicaule) Yellow	15	1 00
Iceland (Nudicaule) Mixed	15	75
Iceland (Nudicaule) Double Mixed	15	75

ORIENTAL POPPIES

Like the annual Poppies, these should be sown as early in the spring as the ground can be worked. The plants disappear during July and August, appearing again when the weather becomes cool. When this fall growth starts they should be transplanted to their permanent flowering quarters. It is well to mark the places they are planted, to insure the roots against disturbance during their annual resting period.

	Pkt.
Orientale, Scarlet	$0 15
Orientale, Oriflamme. Gorgeous orange-scarlet	15
Orientale, Finest Mixed	10

Improved Shirley Poppies

WE HAVE endeavored to give wider prominence to the California Poppy by presenting on a preceding page a color illustration of this lovely flower. We feel, however, that we would be remiss in our desire to serve you if we did not give equal prominence to that lovely and most easily raised of all the California annual flowers, the Shirley Poppy. Its refined and delicate texture, its glorious blaze of color, its adaptability to any location in the garden, however obscure, or, shall we say, neglected—all recommend it to the flower lover. One garden which the writer delights in visiting at various times of the year, used the Shirley Poppy with telling effect last year. There are two flower borders, several hundred feet long and about 12 feet wide, in which are planted, in the autumn of the year, large blocks of Darwin, Breeder, and Cottage Tulips. These are in full bloom in mid-May To take the place of the color furnished by the tulips when they were through blooming, it was decided to plant Shirley Poppies. The seed of these was mixed with approximately twenty-five times its bulk of sharp builders' sand. This was sown broadcast throughout the border and gently firmed on the surface of the ground, even before the Tulips had made their appearance in the spring. The Poppies bloomed wonderfully in mid-June, thereby providing a succession of color in this lovely border in this grand old garden.

We are now offering this annual in its improved forms for your early consideration. The variety Wild Rose, which comes almost entirely true from seed, is perhaps best described as a beautiful shade of wild-rose-pink. Where one color is desired for a bed or border this is splendid. We also offer shades of various colors, and, last and by no means least, a mixture of shades which has been carefully prepared so as to include all the colors from snow-white through all the delicate tints of pink, rose, carmine, to the deepest crimson and blood-red.

We advise that the seed be sown as suggested above. One of the prettiest displays which it was the privilege of the writer to see was the result of seed sown in December, in the manner described, thereby allowing the winter snows to carry the seed just in the surface of the ground and permitting the plants to have the benefit of the earliest spring start. Where planted in beds or borders by themselves, for decoration or cutting, sow in drills or broadcast where intended to bloom as they should not be transplanted, just covering the seed and firming. As soon as plants are well above the ground, thin out to 3 to 4 inches apart for best results. Successional sowings may be made at intervals of several weeks, up to mid-May. The flowers will last several days if picked just before expanding, and the plants will bloom for a longer period of time if the old flowers are removed.

SPECIAL OFFER

Improved Shirley Poppies

WILD ROSE. Wild-rose-pink.

CARMINE SHADES. Shades of carmine-rose.

ROSE SHADES. Shades of rose-pink.

SALMON SHADES. Lovely shades of salmon-pink.

WHITE SHADES. Shades of white and pale tints.

MIXTURE. Splendid mixture of all existing shades.

Each, pkt. 10 cts., ¼oz. 50 cts., oz. $1.50

COLLECTION

Pkt. each of above 6 forms . $0.50
¼oz. each of above 6 forms 2.50

SCABIOSA *Mourning Bride; Pin Cushion Flower*

IF we were carefully to take into consideration the number of easily-grown annual flowers that are best adapted for cut-flower purposes, and if our list were limited in number, we would suggest the growing of Scabiosa. The plants reach a height of about 2½ feet and begin blooming in early July, continuing without interruption until hard frost. The flowers are fully as large as illustrated, and the colors as nearly the same as good color printing can register them.

They make effective lines in the flower-garden. For best results, sow seed as soon as trees are out in leaf in a well-prepared seed-bed, transplanting plants so as to leave 1½ feet between them. It will greatly add to the beauty of the plant if light stakes are used for support, although this is not necessary. Keep flowers well cut as this helps to increase blooming. The beautiful flowers are borne on long stems and will keep almost a week in water after cutting.

1. **AZURE FAIRY.** Clear lavender-blue.
2. **CHERRY-RED.** Rich red.
3. **FLESH-COLOR.** Light pink.
4. **FIERY SCARLET.** Bright scarlet.
5. **KING OF THE BLACKS.** Velvety black-purple.
6. **WHITE.** Pure white.

Each, pkt. 10 cts., ¼oz. 50 cts., oz. $1.50

COLLECTION

1 pkt. each of above 6 varieties . . $0.50
¼oz. each of above 6 varieties . . 2.50

FORSYTHIA

A very decorative shrub with bright golden yellow, star-shaped flowers which burst into bloom at the beginning of spring while the bush is otherwise bare.

Suspensa (Weeping Golden Bells). A tall shrub of willowy growth, the branches gracefully arching and covered with golden yellow bells in early spring.

Viridissima (Golden Bells). Similar to the above but of more erect habit.

Strong plants of either of the above, 2 to 3 feet, 60 cts. each, $6 per doz.

HONEYSUCKLES (Bush Honeysuckles)

We offer two varieties of the Bush Honeysuckles. They are splendid for lawn or border planting.

Tatarica (Tartarian Honeysuckle). Pink flowers, contrasting beautifully with the foliage. Blooms in June.

Tatarica alba. White form of the above.

Either of the above, strong plants, 2 to 3 feet, 50 cts. each, $5 per doz.

HYDRANGEA

We offer two varieties of this, perhaps the most popular of flowering shrubs.

Arborescens grandiflora (Snowball Hydrangea). This magnificent, perfectly hardy American shrub has snow-white blossoms of largest size. One of its most valuable characteristics is its coming into bloom just after the passing of all the early spring-blooming shrubs, flowering from early June to late July. Strong plants, 75 cts. each, $7.50 per doz.

Paniculata grandiflora. Considered the most popular summer-flowering shrub. The flowers, which are borne in dense, pyramidal panicles a foot long, in greatest profusion, are white when they first open but gradually change to rose color, and remain in good condition for weeks. Strong plants, 75 cts. each, $7.50 per doz.

Philadelphus coronarius

Hydrangea arborescens grandiflora

KERRIA (Corchorus)

One of the most graceful and beautiful of the lower-growing shrubs for the front of a shrubbery border, or in a mixed planting of low shrubs around porches.

Japonica. Attractive golden yellow flowers are borne continuously from June to October. Strong plants, 75 cts. each, $7.50 per doz.

PHILADELPHUS (Mock Orange)

This old-fashioned sweet-scented shrub has long been a close rival of the lilac in popularity.

Coronarius (Garland Mock Orange). This is a popular tall variety, refined and beautiful; large white flowers. Strong plants, 60 cts. each, $6 per doz.

PRUNUS

We offer two varieties of the Flowering Plum.

Pissardii (Purple-leaved Plum). A dwarf shrub covered with single white flowers in spring. When they first appear the leaves are a lustrous crimson, changing to rich purple.

Triloba (Double-flowering Plum). An interesting shrub, of medium height, bearing in early spring semi-double, delicate pink flowers over an inch in diameter.

Either of the above, strong plants, $1 each, $10 per doz.

SPIRÆA (Meadow Sweet)

Anthony Waterer. A valuable variety. Color bright crimson. It is of dwarf, dense growth, never exceeding 30 inches in height and blooms the entire summer and fall, if the old flower-heads are removed.

Van Houttei. The grandest of all the white Spireas. It is of compact habit and a beautiful ornament for the lawn at any season, but when in flower is a very beautiful sight, the white blooms almost entirely covering the foliage.

Either of the above, strong plants, 60 cts. each, $6 per doz.

Weigela rosea

We have listed, and carry during the early spring, the flowering shrubs offered on this and the two preceding pages. We will be pleased to make prices to any of our patrons desiring larger quantities or other varieties.

SYRINGA, or LILAC

We offer two of the common varieties of Lilac, but will be pleased to correspond with our customers who are desirous of growing the better named varieties.

Common Purple (*Syringa vulgaris*). Purple.
Common White (*S. vulgaris alba*). White.

Either of the above, strong plants, 50 cts. each, $5 per doz.

TAMARIX

Africana. Strong, slender, tall-growing shrub of irregular habit, with feathery foliage and small, delicate flowers, borne profusely on gracefully-bending branches. The pink flowers are very attractive during May. Strong plants, 2 to 3 feet, 60 cts. each. $6 per doz.

VIBURNUM

Plicatum (Japan Snowball). One of the choice hardy shrubs, with healthy dark green foliage. The perfect balls of pure white flowers are borne in great profusion in May. Strong plants, $1 each. $10 per doz.

Opulus (High-Bush Cranberry). The white flowers in June are followed in autumn by bright scarlet berries, which are very attractive until late in winter. Strong plants, 75 cts. each, $7.50 per doz.

WEIGELAS

These easily take rank among the most popular flowering shrubs, covered, as they are, in May and early June by their large, trumpet-shaped flowers.

Eva Rathke. Considered the finest Weigela in cultivation, blooming continuously throughout the summer and autumn. The flowers are a rich ruby-carmine.

Rosea. Soft rosy carmine.

Either of the above, strong plants, 60 cts. each, $6 per doz.

HEDGE PLANTS

We offer two of the principal shrubs that are extensively used for Hedge Plants

BERBERIS THUNBERGII (Japan Barberry)

Where a dwarf, deciduous hedge is wanted, nothing equals this beautiful Barberry. It requires but little pruning to keep it in shape. The leaves are small, light green, and towards fall assume rich, brilliant colors, the fruit or berries becoming scarlet. It is used extensively throughout the country and is perfectly hardy.

	Doz.	100
Extra-strong, 1 to 1½ ft., 4 to 6 branches..	$5 00	$35 00
Extra-strong, 1½ to 2 ft., 6 to 8 branches..	7 00	50 00

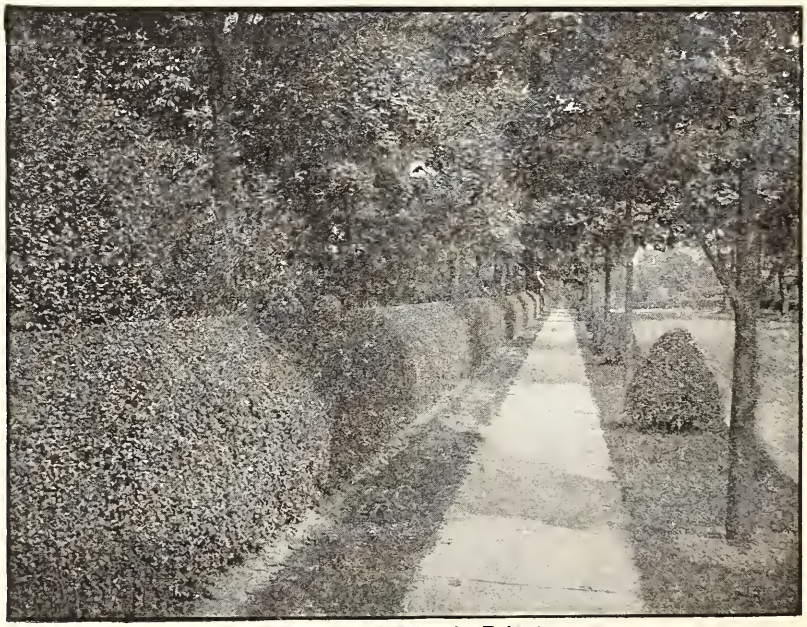
CALIFORNIA PRIVET

Ligustrum ovalifolium

This is, perhaps, the most popular of all the hedge plants. Being absolutely hardy, it increases in beauty with each successive year. To get best results, plants should be set 1 foot apart in double rows in zigzag fashion, so that the plants are diagonally opposite each other. This practically places them 6 inches apart, which is desirable to get quick, dense growth. May be planted from March 15 to May 15, or from October to frost. Extra-strong, 2 ft., 5 to 6 branches, $2 for 25, $7 per 100, $60 per 1,000.

BOXWOOD (Buxus)

We offer this excellent dwarf plant for edging. It is advisable to place orders early in the season. They require to be planted early in the spring in order to get the benefit of good spring growth before hot weather sets in. $2 per doz., $12 per 100, $100 per 1,000.



Hedge of California Privet.

GRAPE-VINES

Orders for GRAPE-VINES for shipment outside of the states of New York, New Jersey, Pennsylvania, and Connecticut, we cannot accept

We receive many flattering testimonials as to the quality of our Grape-vines.

Selected vines, except where noted, 75 cts. each, $8.50 per doz.; extra-strong, $1.25 each, $12.50 per doz.

White Grapes

Diamond. White. Bunch large, compact, shouldered; berries large, round; skin thin, but tough; flesh tender, juicy, with but little pulp. Vine is a good grower, with thick, healthy foliage; hardy and productive; of fine quality. Ripens a little before Concord.

Green Mountain. White. Bunch medium to large, shouldered; berries medium, greenish white; skin thin, tough; pulp tender, sweet, with few seeds; of excellent quality, free from foxiness; very early. Vine vigorous, healthy, hardy and very productive. A fine Grape, identical in every way with Winchell.

Niagara. White. Bunch very large and handsome, often shouldered; compact; berries large, round; skin thin, tough, does not crack, and carries well; has not much pulp when fully ripe; melting, sweet, with a flavor and aroma peculiarly its own, and agreeable to most tastes; ripens with Concord.

Pocklington. Pale green, usually with tinge of golden yellow where exposed to the sun; bunch large, very compact; berries very large, covered with a beautiful white bloom; flesh juicy, sweet, with considerable pulp.

Martha. White, turning pale yellow when fully ripe; very sweet; bunch medium, compact. Vine healthy and hardy. Very productive.

Red Grapes

Agawam. Red or maroon. Bunch usually loose, shouldered; berries large; skin thick; flesh pulpy, meaty, juicy, of a rich, peculiar aromatic flavor; ripens about with Concord; a good keeper. Vine a strong, rank grower, hardy and productive; should be pruned, leaving long canes.

Brighton. Red. Bunch medium to large, long, compact, shouldered; berries medium; skin thin; flesh tender, sweet, with scarcely any pulp; quality best. Vine a vigorous grower, healthy, hardy and productive; one of the best early red Grapes. The flowers have reflexed stamens and do not always fertilize fully unless planted with Concord, Worden, Martha, or other varieties which blossom at the same time. Ripens with Delaware.

Catawba. Dark red when fully ripe. Bunch large, moderately compact, shouldered; berries medium to large; skin thick, tough; flesh somewhat pulpy, with rich, vinous flavor, of best quality for both table and wine. Vine a good grower, hardy, with healthy foliage; very productive and profitable where it succeeds and matures well. Ripens too late for high latitudes.

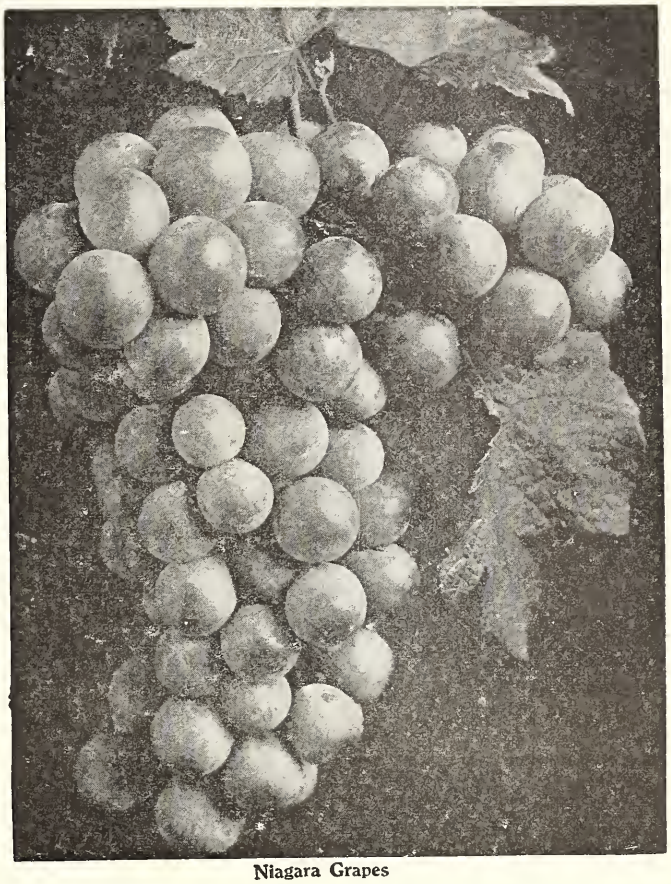
Delaware. Red. Bunch small, compact, sometimes shouldered; berries small; skin thin, but firm; flesh juicy, very sweet and refreshing, of best quality for both table and wine; ripens with Concord or a little before. Vine hardy, productive, a moderate grower; requires rich soil and good culture. Is regarded by many as the best American Grape, all things considered. It should be in every garden and vineyard.

Lucile. Red. Very large in bunch and berry; compact; skin thin but tough. Good shipper; exceedingly productive. Flesh pulpy, sweet, somewhat foxy.

HUBBARD The New Black Grape

Quality sweet and delicious, having that fine and pleasant flavor approaching the European or Vinifera Grapes; seeds few and small, which separate freely from the tender pulp; skin thin and firm; berries and bunch large and uniform. Ripens about 10 days earlier than Concord. We have investigated many new Grapes in the past 10 years and found no other with so many excellent points. The Hubbard Grape being of better quality, a better shipper, better size, healthy foliage, a strong grower and earlier ripening makes it a more desirable Grape to plant than either Concord or Niagara. Our supply of vines of this new Grape is limited and orders will be filled in rotation.

3-yr., first-class Vines, $1.50 each, $12 for 10, delivered by parcel post



Niagara Grapes

Black and Blue Grapes

Concord. Black. Early. Decidedly the most popular Grape in America, and deservedly so. Bunch large, shouldered compact; berries large, covered with a rich bloom; skin tender, but sufficiently firm to carry well to distant markets; flesh juicy, sweet, pulpy, tender. Vine a strong grower, very hardy, healthy and productive. For general cultivation the most reliable and profitable variety.

Eaton. Black. Similar in foliage to Concord. In growth, health, and hardiness of vine, in every respect its equal, while in size of bunch and berry it is much larger and more attractive. Leaf large, thick, leathery, covered on the under side with a thick brownish yellow down. Bunch very large, compact, double shouldered; berries very large, many 1 inch in diameter, round, black, covered with a heavy blue bloom, adheres firmly to the stem; skin thin, but tough; pulp tender, separating freely from the seeds and dissolving easily in the mouth; very juicy. Ripens with Concord or a little earlier.

Moore's Early. Black. Bunch rarely shouldered; not quite so large as Concord; berries larger and very much like it in flavor and quality. Vine a moderate grower; very healthy and hardy; foliage thick, leathery, somewhat resembling Concord, except on the under side, which is covered with a yellowish brown down. Produces a fair, and, with high cultivation, a heavy crop. Ripens so early as to be nearly out of market before Concord is ripe and is, therefore, a very popular early market variety. Succeeds best in rich soil.

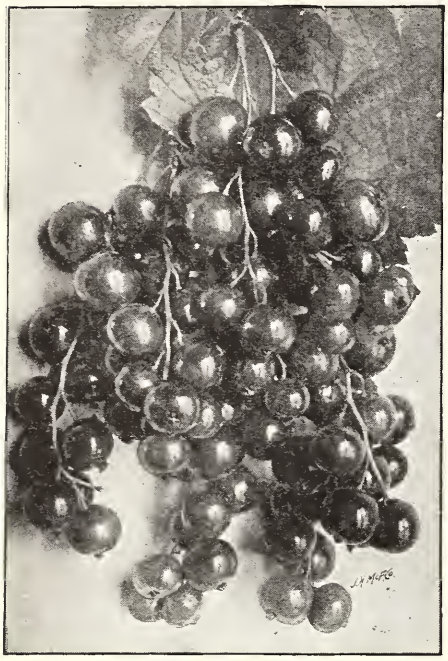
Worden. Black. Bunch large, sometimes shouldered, compact; berries very large, skin thin. Superior to the Concord in the following points: It is better in quality, has a larger berry, a more compact and handsome cluster, and ripens five to ten days earlier.

CHOICE SMALL FRUITS

Orders for CURRANTS, GOOSEBERRIES AND RASPBERRIES for shipment outside of the states of New York, New Jersey, Pennsylvania, and Connecticut, we cannot accept.

We have endeavored to list only the choicest sorts and, while our list is a short one, only the finest sorts are offered. This is preferable to a long list which would necessarily contain varieties of less merit.

SHIPPING SEASON APRIL AND MAY



Wilder Currants

CURRANTS

Plant in rows 6 feet apart, and 4 feet apart in the rows, or, if to be cultivated both ways, 5 feet apart each way. The soil should be well cultivated to a depth of 12 inches. Plants should be well set and roots firmed in the soil. After planting cut back the tops one-half of the previous year's growth. For the first 4 or 5 years some of the wood made in the spring should be cut back in the fall, in order to make a more symmetrical plant and a greater number of fruit-buds. Rotted stable manure around base of plant forked in each fall will prove very beneficial.

Selected 3-year-old stock, 50 cts. each, $5 per doz., $40 per 100

Wilder (President Wilder). Bush upright, vigorous; clusters above medium length; berries averaging large; bright red; excellent, with a mild subacid flavor. Ripens early and remains bright and firm until very late. Because of its exceedingly vigorous growth, great productiveness, high quality, and remaining good so long after ripening, we recommend this as one of the best Red Currants, both for table and market.

Boskoop Giant. Bush strong grower; productive. Fruit rich, sweet flavor, ripens evenly and hangs well on bushes for a long time after ripening in good condition; firm, pulpy flesh, making it well adapted to canning and shipping. Largest and best black variety.

White Imperial. Bush vigorous and very productive; clusters large; berries very large, sweet and most delicious. This is the best of the White Currants, and fine for the table. Equally desirable as a market Currant.

Red Cross. Quality is good and the size of berries uniform. The red clusters are large, making it easy to pick. It makes abundant wood-growth and is not much bothered by borers.

Black Currants. We are unable to supply these on account of blister rust which injures pine trees. The Conservation Commission of the state and the Federal Government have prohibited the shipment of these bushes.

GOOSEBERRIES

Plant in the same manner as described for currants, and give the same annual manuring. The American varieties will need close pruning every year.

AMERICAN VARIETIES

Selected 3-year-old stock, 60 cts. each, $6 per doz., $45 per 100

Downing. Pale green, large, prolific and good. Best for home and market use.

Red Jacket. Bush vigorous, upright and productive. Fruit varies in size from medium to above medium. Color pale red.

Chautauqua. Golden yellow; large variety and of fine quality.

We offer for August delivery strong pot-plants of Strawberries. Write for our Midsummer catalog, issued in July.

BLACKBERRIES

Blackberries require the same treatment as raspberries and should be planted the same distance apart. We have avoided listed varieties of the prostrate habit, the tips of which constantly root in the ground.

Extra-strong canes, 20 cts. each, $2 per doz., $15 per 100

Blowers. Large; glossy; fine quality. Ripens early and continues long in season.

Eldorado. Large, coal-black, sweet, melting, without hard core. Vigorous, hardy and very productive. Fine market variety.

Iceberg. A snowy white Blackberry. Early, sweet, and tender.

Rathbun. Very large, jet-black; firm; best quality; very productive.

RASPBERRIES

Raspberries succeed well on any good land suitable for corn or wheat, but amply repay high cultivation. Ground bone is the best fertilizer. Red and yellow varieties should be planted in rows 6 feet apart and 3 feet apart in the rows; black- and purple-cap varieties 7 feet apart and 3 feet in the rows. Cut out all old wood as soon as the canes have done bearing—to give more vigor to the young canes. Blackcap varieties should be planted only in the spring.

Extra-strong canes, 20 cts. each, $2 per doz., $15 per 100

RED

Cuthbert. Deep rich crimson; large to very large; very firm. One of the very best market varieties. Season medium to late. A remarkably strong, hardy and productive variety.

Marlboro. Light crimson, large, very firm, and of good quality. A fine early market variety; vigorous and productive.

Early June. A new, early, red Raspberry, originated at the New York Experiment Station. Berries large and firm, attractive, bright red color; very productive. A valuable sort for the garden or market.

BLACK AND PURPLE

Columbian. Dull purple, very large, moderately firm. A good market berry and one of the best for canning. Bush remarkably strong and wonderfully productive.

Plum Farmer. A large, blackcap berry of rich, sweet quality. Hardy and very productive. One of the best market varieties and very popular.

YELLOW

Golden Queen. Large, golden yellow, of fine quality. Very hardy and productive; succeeds almost anywhere, and is a most desirable berry, bringing good prices in the market.

TWO FINE EVERBEARING RASPBERRIES

EXTRA-STRONG CANES

We consider the following two Raspberries of superior quality and quite the finest of recent introduction.

White Queen. This wonderful new Raspberry bears an abundance of almost white fruits from August until well into November. The extra-large, firm berries, which are free from seeds and acid, are of exquisite flavor and aroma. Plants attain a height of 6 feet and bear good crop the first year. **30 cts. each, $3 per doz., $20 per 100.**

St. Regis. A remarkable Raspberry and, all things considered, the most valuable variety that has appeared in the last quarter of a century. The berries, though not of large size, are bright red and of excellent quality. It ripens very early, in advance of all the other red varieties, and the canes, in addition to being exceedingly hardy and drought-resistant, are exceedingly prolific. It has rich green foliage that does not scald or rust, hence it succeeds on hot, sandy soil where other varieties fail. Besides yielding an enormous crop in June, it gives also a moderate one in the autumn, and, unlike other red Raspberries, it produces a crop of berries the first year, or the season it is planted. **20 cts. each, $2 per doz., $15 per 100.**

SELECTED FRUIT TREES

Orders for FRUIT TREES for shipment outside of the states of New York, New Jersey, Pennsylvania, and Connecticut, we cannot accept.

We recommend northern-grown fruit trees to our customers, as they will be found to give better satisfaction than southern-grown or western-grown trees. We furnish excellent clean trees, which, if planted carefully, are almost sure to succeed. Trees, when received, should be planted at once in rich, prepared soil, the roots being carefully separated and spread. If dry weather follows planting, the trees must be watered and mulched. Branches of last season's growth should be well cut back, thus encouraging the vigorous growth of new healthy shoots.

Apples

The following is a list of the best Apples we have decided to include after trial. The months indicated are those in which the different varieties usually mature.

SUMMER VARIETIES

Early Harvest. Medium size; pale yellow; mild, fine flavor. August.

Golden Sweet. Large, yellow, sweet variety. August, September.

Red Astrachan. One of the best of the summer varieties. Apples are of medium size but uniform; flesh white, streaked with red; juicy and tender. August.

Sweet Bough. Splendid for baking; large; pale yellow; tender and sweet. August.

Yellow Transparent. A splendid early variety; fruit good size; mild and delicious; yellowish white when ripe.

AUTUMN VARIETIES

Fall Pippin. Very large; yellow; tender, juicy and rich. A favorite fall cooking Apple. October to November.

McIntosh Red. A valuable hardy Canadian sort. Medium size; nearly covered with dark red; flesh white, fine, tender, juicy and refreshing. A good annual bearer of fair, handsome fruit. Resembles the Fameuse, but is larger and more hardy, and fully equal in quality to this standard sort. November to February.

Gravenstein. Vigorous growth; fruit large; greenish yellow, striped with red; good for home use or market. September, October.

Wealthy. A native of Minnesota, where it has proved perfectly hardy, vigorous and productive. Fruit of medium size; red, streaked with white. Oct. and Nov.

WINTER VARIETIES

Baldwin. A fine keeper in a common dry cellar. Very large, round; red-and-yellow skin. Very profitable market sort. December to March.

Delicious. Distinctive in shape and beautiful in color. Large; brilliant dark red, blending to golden yellow at the blossom end; sweet in flavor, slightly touched with acid, but only enough to make it more pleasing. Bears annually. Dec. to April.

King (Tompkins County). Large and handsome; striped red and yellow. Tree vigorous and productive. November to May.

Northern Spy. Large; bright yellow; juicy, crisp and tender. Splendid for table or cooking. Ready to eat in November and will keep in good condition until June.

Rhode Island Greening. A splendid cooking variety. Fruit large; green, sometimes with red cheek. October to February.

Roxbury Russet. Medium size; dull green, nearly covered with russet; skin tough; flesh mild and appetizing. January to June.

Spitzenburg. Large, round; red with gray dots; delicious flavor. December to April.

Winesap. Medium; dark red; subacid, excellent. Tree a moderate grower and abundant bearer. A favorite market variety in the West. December to May.

Any of the above, Standard 3-year-old XX, $1.50 each, $15 per doz.

SULCO-V.B.

A specific for the control of San José, Red Orange, Cottony Cushion and other scale insects infesting fruit. Plant Lice, Pear Psylla, Leaf Blister Mites, Scurfy Bark Louse. Qt. 60 cts., gal. $1.75, 5 gal. $7, 10 gal. $12.50, ½bbl. (30 gal.) $25.50, bbl. (50 gal.) $37.50.

Crab-Apples

Hyslop. Large size; red in color; hardy; sharp acid flavor. September, October.

Large Yellow Siberian. Nearly as large as the above; fine amber or golden yellow.

Transcendent. All things considered, this is one of the most valuable varieties of Crab-apples grown. Tree remarkably vigorous, growing to a good size and very productive. One of the best sellers.

Any of the above, 3-year-old XXX, $1.50 each, $15 per doz.

Pears

SUMMER VARIETIES

Bartlett. Splendid flavor; large; yellow and red; good for eating or canning. September.

Clapp's Favorite. Good bearing variety. Fruit large; yellow and crimson. August.

Wilder. Regular in form, fair size and very handsome; greenish yellow with reddish cheek; flavor sweet and pleasant. August.

AUTUMN VARIETIES

Anjou. Fruit large; yellow; very little core; splendid flavor; keeps well into midwinter. November.

Beurre Bosc. Large; yellow-russeted; half-melting, high-flavored and excellent. A poor grower. September and October.

Duchesse d'Angouleme. Very large; greenish yellow, sometimes a little russeted. Makes a beautiful tree; does best on quince. One of the best. October and November.

Seckel. A splendid Pear for the home garden. Of very rich flavor; small; color brownish green with reddish cheek. September, October.

Sheldon. Medium to large; yellow and red. Very excellent and promising variety from Wayne County, N. Y. Tree a fine grower and productive; must be double worked to grow on quince. October.

WINTER VARIETIES

Lawrence. Probably the best dessert Pear for use in early winter. Fruit is of fair size, yellow, juicy and sweet; excellent for cooking or eating. December.

Kieffer. Tree a remarkable grower, with so vigorous a constitution that it rarely, if ever, blights. Fruit of fine size, rich color, and fair quality. Brings high prices in competition with other varieties, and is a great market Pear. Best when picked at maturity and house-ripened. October and November.

Any of the above, 3-year-old XXX, $2.00 each, $20 per doz.

Cherries

BIGARREAU or SWEET

Black Tartarian. Vigorous growth; very large; purplish black; one of the best. Ripening end of June.

Governor Wood. Vigorous growth; medium; clear, light red; tender and delicious. Ripening end of June.

Schmidt's Bigarreau. A most promising Cherry. Fruit of immense size, of a rich, deep black; flesh dark, tender, very juicy, with a fine flavor. Bears abundantly, and makes a most excellent dish for the table.

Windsor. Originated at Windsor, Canada. Fruit large, liver-colored.

Yellow Spanish. Large; pale yellow, with red cheek; firm, juicy and excellent. Last of June.

MORELLO or SOUR CHERRIES

Early Richmond. Medium size; dark red; juicy, rich acid flavor. The stone adheres to the stem. One of the most valuable of sour Cherries.

Montmorency (Large Montmorency). A Cherry of the Richmond class, but larger and more solid. Ripens from seven to ten days later than the Richmond.

Morello, English. Large; dark red, nearly black; tender, juicy, subacid; valuable for preserves; tree small; productive.

Three-year-old XXX, $2 each, $20 per doz.

Plums

Coe's Golden Drop. Large and handsome; light yellow, firm, rich, sweet; one of the best of the late Plums. Last of September.

German Prune. A large, long, oval variety, much esteemed for drying; color dark purple; of very agreeable flavor. September.

Imperial Gage (Flushing Gage; Prince's Imperial Gage). Fruit large, oval; skin pale green; flesh juicy, sweet, rich and excellent. Middle of August.

JAPAN PLUMS

Abundance, or **Botan.** Lemon-yellow ground, nearly overspread with bright cherry and heavy bloom; large to very large, oblong, tapering to a point; flesh orange-yellow, melting. August.

Burbank. Fruit medium to large, roundish conical; dark red or purplish, running to bright amber; flesh amber-yellow, melting, juicy, with rich sugary flavor; stone small and free. One of the best. August.

Three-year-old XXX, $2.25 each, $24 per doz.

Peaches

Belle of Georgia. Very large; skin white with red cheek; flesh white, firm and of excellent flavor; fruit uniformly large and showy. September 1 to 5.

Crawford's Early. A magnificent large, yellow Peach of good quality. Tree vigorous and very productive. Its fine size, beauty and productiveness make it one of the most popular sorts.

Crawford's Late. Very large; yellow; juicy, good; freestone. End of September.

Carman. A hardy rot-proof Peach, ripening with Early Rivers. Large, round, with pale yellow skin and red blush on sunny side; white flesh, sweet flavor.

Elberta. Large, light-colored yellow Peach; juicy, well-flavored; finest yellow freestone.

Greenboro. The largest and most beautifully colored of all the early Peaches. Of good quality; juicy; a freestone, but adheres slightly.

J. H. Hale. New. Large, late Peach. Fine.

Waddell. Fruit medium to large, oblong; skin rich creamy white, nearly covered with red; flesh white, firm, rich and sweet; freestone. Very prolific and very early.

Two-year-old XXX, 75 cts. each, $8 per doz.

Quinces

Apple, or **Orange.** Large, roundish; bright golden yellow; very productive.

Bourgeat. One of the finest yet offered. Color, rich golden, and quality extra good. Extra large.

Champion. A vigorous and productive variety. Ripening very late.

Rea, or **Rea's Mammoth.** A very large and fine variety of Orange Quince. One of the best.

Three-year-old XXX, $2 each, $20 per doz.

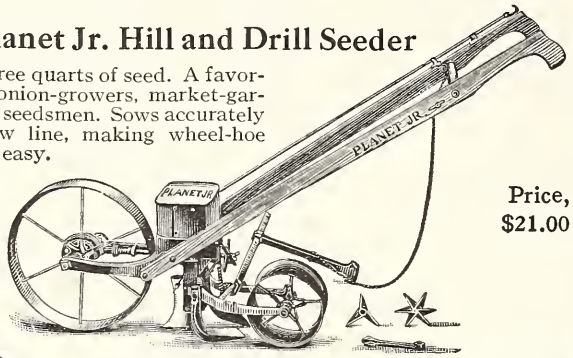
Planet Jr. Farm and Garden Tools

72-page Planet Jr. catalogue free. Describes 70 tools, including Seeders, Wheel Hoes, Horse Hoes, Harrows, Cultivators. Write postal for it

They cut down work and boost your crops. These scientific tools do the work of three to six men, give bigger yield, and save their cost in a single season. Invented and made by a practical farmer and manufacturer, with half a century's experience. Planet Jrs. are strong and lasting. Every tool fully guaranteed. Come and let us convince you of their economy. THE FOLLOWING PRICES ON PLANET JR. ARE SUBJECT TO CHANGE WITHOUT NOTICE.

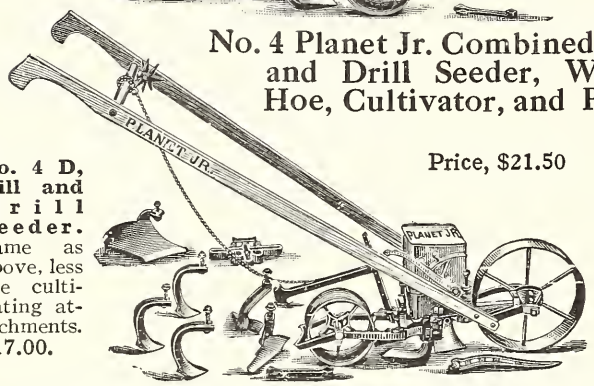
No. 3 Planet Jr. Hill and Drill Seeder

Holds three quarts of seed. A favorite among onion-growers, market-gardeners, and seedsmen. Sows accurately in a narrow line, making wheel-hoe cultivation easy.



Price, $21.00

No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator, and Plow



Price, $21.50

No. 4 D, Hill and Drill Seeder. Same as above, less the cultivating attachments. $17.00.

Soon pays for itself in the family garden as well as in the larger acreage. Sows all garden seeds (in drills or in hills), plows, opens furrows and covers them, hoes and cultivates quickly and easily.

No. 25 Planet Jr. Combined Hill and Drill Seeder, Double-Wheel Hoe, Cultivator and Plow

Price, $26.00

A splendid combination for the family garden, onion-grower, or large gardener. It is a perfect Seeder, and combined Double- and Single-Wheel Hoe.

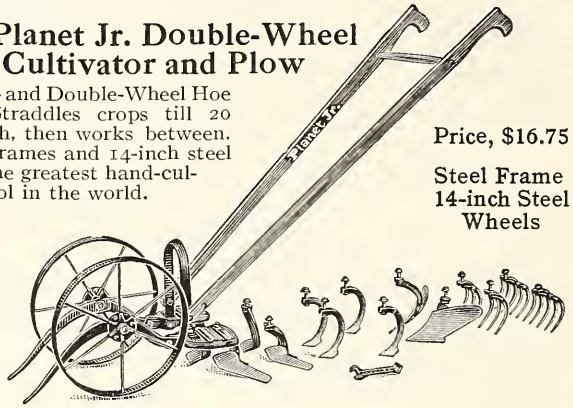
No. 31 Planet Jr. Combined Drill Seeder and Single-Wheel Hoe

Price, $12.50

This new tool is of great value to gardeners who have never felt able to own either a Seed Drill or a Wheel Hoe. It will sow even a small packet of garden seed with great precision. Quickly changed to a splendid Wheel Hoe. A special machine for the small gardener.

No. 11 Planet Jr. Double-Wheel Hoe, Cultivator and Plow

A Single- and Double-Wheel Hoe in one. Straddles crops till 20 inches high, then works between. Has steel frames and 14-inch steel wheels. The greatest hand-cultivating tool in the world.

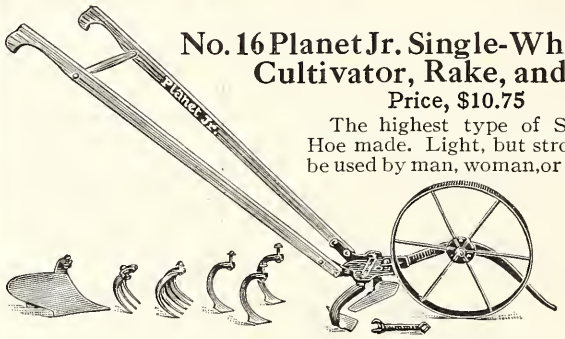


Price, $16.75

Steel Frame
14-inch Steel Wheels

No. 16 Planet Jr. Single-Wheel Hoe, Cultivator, Rake, and Plow

Price, $10.75



The highest type of Single-Wheel Hoe made. Light, but strong, and can be used by man, woman, or boy. Will do all the cultivation in your garden in the easiest, quickest, and best way.

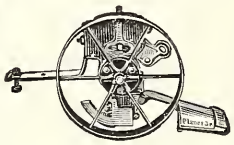
No. 17 Planet Jr. Single-Wheel Hoe. Price, $9.00

Has a pair of 6-in. hoes, a plow, and a set of cultivator teeth; sufficient for most garden work.

No. 35 Planet Jr. Seeder Attachment for Wheel Hoes and Garden Plows

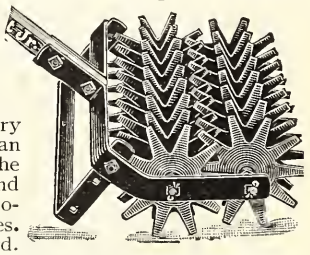
Price, $7.00

Seeder attachment with handle, $7.75



Ever since the wheel hoe has replaced the hand hoe in the kitchen-garden, there has been an insistent demand for a small seeder that could be attached to the wheel hoe. The amateur gardener did not always feel justified in buying a complete seed drill, which, while exceedingly useful, was idle a great part of the season and not particularly suited for planting short rows and in small quantities. We are now prepared to furnish the seeding attachment shown above which can be attached to any Planet Jr. Single- or Double-Wheel Hoe or Garden Plow.

Planet Jr. Star Pulverizer, Weeder, and Cultivator

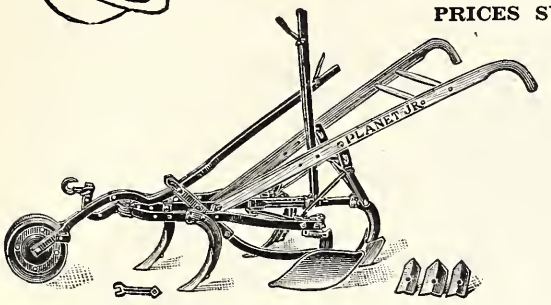


Made in two sizes. The one is very light, has one row of star discs and an oscillating blade, and is very useful in the small garden, in the flower-garden, and particularly where plants are close together. The width of cut is only 7½ inches. It can be worked backward or forward. The star discs break up the soil and the oscillating blade pulverizes it, at the same time cutting off the weeds directly beneath the surface. **Price, $4.50.**

The larger size has a 13½-inch cut, two rows of star discs, and a long handle. Just the tool for pulverizing and leveling seed-beds and hundreds of them are giving entire satisfaction to their users year after year. **Price, $7.**

Planet Jr. Farm and Garden Tools

PRICES SUBJECT TO MARKET CHANGES

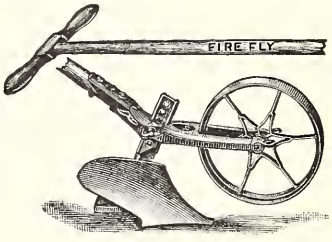


No. 8 Planet Jr. Horse Hoe and Cultivator

Price, complete, $21.50. Weight, packed, 83 lbs.

No other cultivating machine is so widely known as the Planet Jr. Combined Horse Hoe and Cultivator, for it is in use throughout the civilized world. It is so strongly built as to withstand incredible strain, yet it is light and easy to handle. It opens and closes furrows, hoes right up to the plants without danger of injuring, throws dirt to or from the row and throws back from center again. You can cultivate to any depth desired, and adjust for any width. Every part is perfected to make the tool acceptable to the intelligent farmer who knows the best is always the cheapest.

Fire-Fly Garden Plow. Price, $4.75

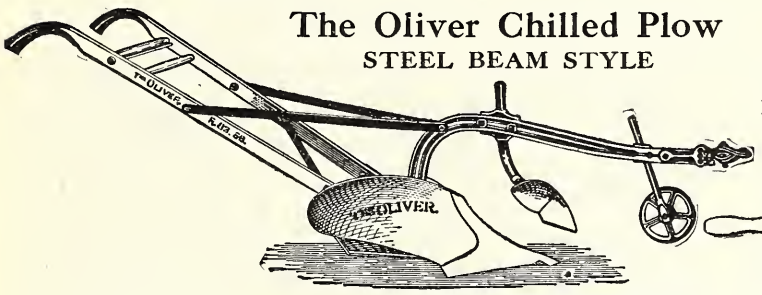


This tool is useful to owners of small gardens. It will throw a furrow 4 to 6 inches wide and 1 to 3 inches deep, and deeper by going a second time in each furrow. It opens furrows for manure or seeds and covers them, and opens up rows for all kinds of plant-setting. In cultivating, plow away lightly, allow a few days for all weeds to die, and plow back again. Chicken-raisers find it of great advantage in plowing up their scratching yards.

Planet Jr. No. 17½. Single-wheel hoe, 6-inch hoe and cultivator only $8 25
Planet Jr. No. 33. Single-wheel hoe, cultivator, and plow (Wheel Hoe equipment of No. 31 listed on preceding page) 7 00

The Oliver Chilled Plow

STEEL BEAM STYLE

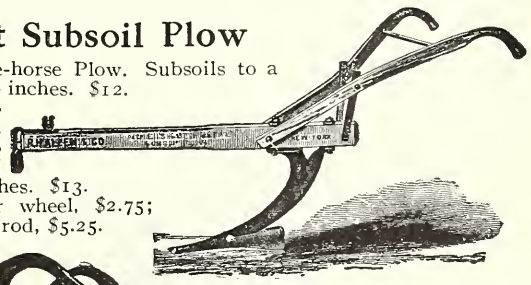


		Capacity	Wood Beam	Steel Beam
No. B-C	One-horse, light	5 x 10 in.	$12 50	$13 50
No. 10	One-horse, heavy	5½ x 11 in.	17 25	17 25
No. 19	Two-horse, medium	6½ x 12 in.	20 25	20 25
No. 20	Two-horse, medium	7 x 13 in.		23 00
No. 82	Two-horse, light	7½ x 13 in.		20 25
No. 83	Two-horse, medium	7½ x 14 in.		23 00
No. 84	Two-horse, heavy	9 x 16 in.		26 00

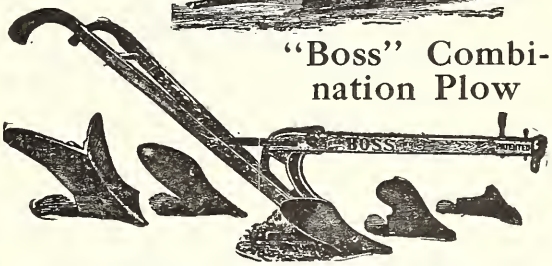
Plow with wheel, one-horse, wood beam, $1.65 extra.
Plow with wheel, two-horse, wood beam, $2.50 extra.
Plow with wheel, one- and two-horse, steel beam, $1.95 extra.
Plow with jointer, one-horse, wood beam, $3.60 extra.
Plow with jointer, two-horse, wood beam, $4.40 extra
Plow with jointer, one-horse, steel beam, $3.85 extra.
Plow with jointer, two-horse, steel beam, $4.70 extra.

Patent Subsoil Plow

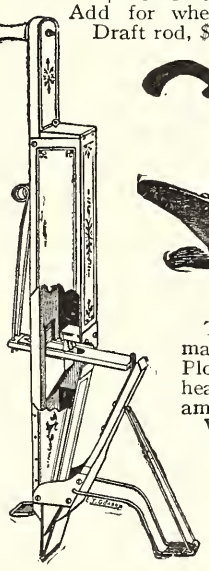
No. 16. One-horse Plow. Subsoils to a depth of 10 inches. $12.
No. 17. Two-horse Plow. Subsoils to a depth of 14 inches. $13.
Add for wheel, $2.75; Draft rod, $5.25.



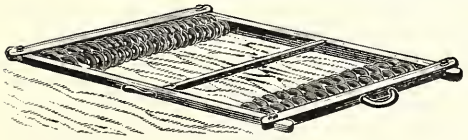
"Boss" Combination Plow



The handiest one-horse turning Plow for use by market-gardeners and farmers. Actually four Plows in one. It can be worked as a medium and heavy one-horse Plow, and as a Plow for operating among cabbage, strawberries, etc. $10.
With the double mold-board and share, $13.



Steel Disc Smoothing Harrow



The frame measures 6 feet 8 inches by 6 feet and has four sets of rollers, having 58 discs 8 inches in diameter. A very useful harrow, $40.

American Corn Planter

Is fitted with patent adjustable seed disc and brass-spring cut-off. Does accurate work. $3.25.

You Get Bigger Crops from Corrected Soils

TEST AND CORRECT EVERY FIELD BEFORE PLANTING

The **"Big Crop"** Soil Test tells you whether or not any piece of land is in the proper condition to produce a **"Big Crop."** It tells in a few minutes and at the cost of 2 cents per field, how to insure the biggest results from lime and manure at the lowest cost. In detail will tell you:

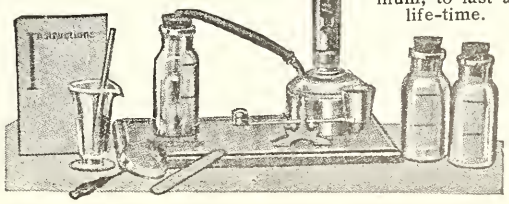
Whether or not your soil needs lime and how much per acre.
Whether or not manure (organic matter) is needed.
Whether or not your soil needs inoculation for alfalfa, clovers, cowpeas, soy beans, vetch, and other legumes.
Where and where not green manuring will pay.
Which fields of your farm are best adapted to alfalfa, clovers, grain, corn, potatoes, beets, etc.
Where and where not to apply chemical fertilizers and how to use them at the least possible loss through leaching.
How to build up worn, thin, neglected soil properly and systematically.
In short, it will answer all questions as to how to put your land in the best condition for bigger crops and lasting soil fertility.

Lime and manure (organic matter) are the most important **"Big Crop"** makers in the soils. If the soil runs short in these soil elements, crop yields run short also. Every crop eats up lime and manure, every rain washes lime and manure out of the soil. No two soils contain the same proportions of lime and manure.

If you know each year by testing each field with the **"Big Crop"** Soil-Tester, **How Much** lime and manure is left, then you can add enough, where it will pay the biggest returns instead of spreading it where it is not needed and cannot be made to pay.

AUTOMATIC. Any 12-year-old boy can make the tests.

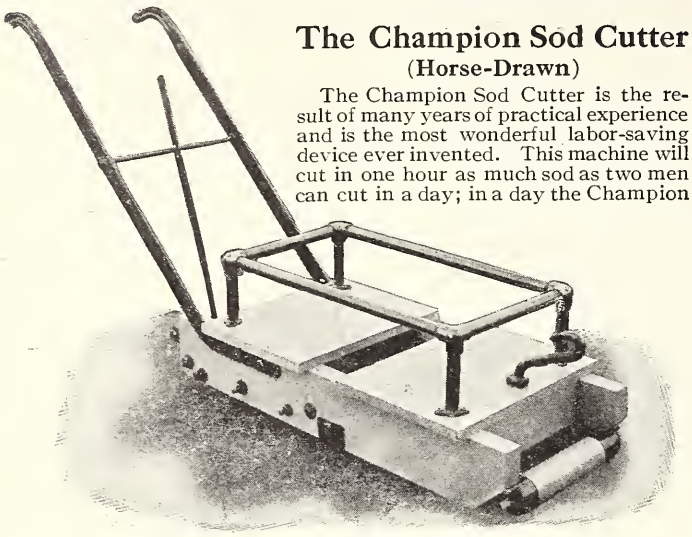
Substantially built from steel, brass, aluminum, to last a life-time.



Price: $12 per outfit, complete. Shipping weight, 4 lbs. A test costs 2 cents and takes 2 minutes to make

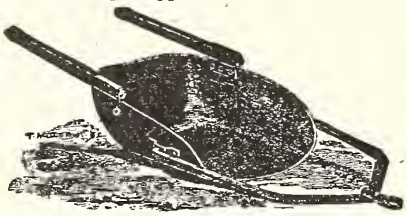
PRICES SUBJECT TO MARKET CHANGES

The Champion Sod Cutter
(Horse-Drawn)



The Champion Sod Cutter is the result of many years of practical experience and is the most wonderful labor-saving device ever invented. This machine will cut in one hour as much sod as two men can cut in a day; in a day the Champion will cut from 25,000 to 35,000 feet of sod, and at this rate you can save the price of a machine in a short while.

This machine is so constructed that it can be adjusted to cut the sod the one uniform thickness, 1 to 2 inches, 12 inches wide. This is very important, especially when a vast amount of sod is to be laid. One man can lay as much sod as three or four men can by the old method of cutting. $55 each.

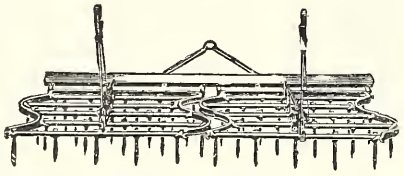


Solid Steel Scrapers

Necessary in all golf construction work.

No.	Width	Capacity	
1	32 in.	7 ft.	$14 00
2	29 in.	5 ft.	13 50
3	26 in.	3 ft.	13 00

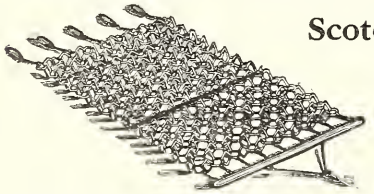
All-Steel Lever Spring Spike Tooth Harrow



This Harrow, having *spring action* upon the *teeth*, allows them to yield in meeting an obstruction, thus saving strain or breakage.

For One Horse.
With 25 Teeth in One Section, Spreading. 4 ft. $13 50
With 30 Teeth in One Section, Spreading. 5 ft. 15 00
For Two Horses.
With 50 Teeth in Two Sections, Spreading. 8 ft. 27 50
With 60 Teeth in Two Sections, Spreading. 10 ft. 30 00
For Three Horses.
With 75 Teeth in Three Sections, Spreading. 12 ft. 41 00

Scotch Chain Harrow



Hundreds of wrought-iron links are woven into what is practically a blanket of chain. This arrangement is ideal in smoothing land as a final preparation for grass seeds; it may also be drawn over the soil after seeds are distributed for the purpose of covering them. Used on driveways and race-tracks, it smooths the surface, eliminating ruts and footprints. The Scotch Chain Harrow is made in three sizes, the Small for one horse, the Medium for two horses, and the Large for tractor. Small size, 5 x 6 ft., $35; Medium, 6 x 7½ ft., $45; Large, 7½ x 7½ ft., $55.

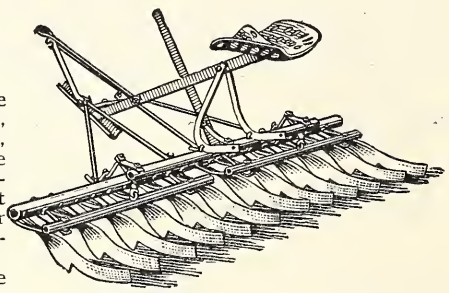
Spike Rollers

Invaluable for the greenkeeper, groundsman, and large lawn owner. The secret of fine turf is largely a matter of continued top-dressings; these top-dressings are much more effective if their application is followed by a good spike rolling and then a brushing. This places the compost *just where it is needed*, namely 1 and 2 inches down *into* the soil. An occasional spike-rolling will open "hide-bound" turf, correct the results of excessive heavy rolling, and facilitate circulation of air and moisture in the soil.

Hand Spike Roller for putting-greens, tennis-courts, and small lawns. $125.

Horse Spike Roller. For golf fairways, polo-fields, and large lawns. 3 ft. 1-horse (1,600 lbs.) $425; 5 ft. 2-horse (2,000 lbs.) $490

Acme Pulverizing Harrow

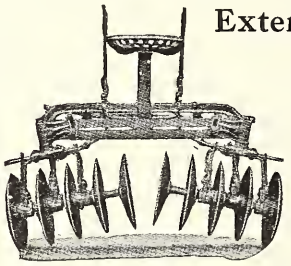


A general-purpose Harrow that crushes, cuts, turns, smooths, and levels all in one operation. For reducing clod land into that fine tilth necessary for proper seeding; valuable on fairways.

All sizes are flexible except Nos. G and H.

No.		Each
G	For One Horse, cuts 3 ft.	$14 00
H	For One Horse, cuts 4 ft., 4 in.	18 00
23	For Two Horses, cuts 6 ft., 6 in.	28 00
26	For Two Horses, cuts 8 ft., 6 in.	32 50
24	For Four Horses, cuts 13 ft., 6 in.	62 00
25	For Two Horses. For Orchards.	38 00

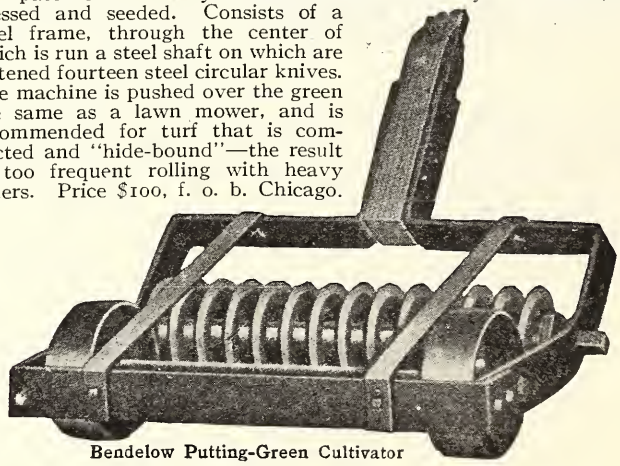
Extension Disc Harrow, with Reversible Gangs



Square braces take the heavy, backward thrust of the gangs. Levers are bolted to the frame and are very rigid. The frame is of angle steel, slotted to allow adjustment of gangs. These can be shifted from one side to the other or just turn them around on the pivot quickly and easily. Each With ten 16-inch Solid Discs. . . $60 00

The Bendelow Putting-Green Cultivator

A patented device by means of which turf may be aërated, top-dressed and seeded. Consists of a steel frame, through the center of which is run a steel shaft on which are fastened fourteen steel circular knives. The machine is pushed over the green the same as a lawn mower, and is recommended for turf that is compacted and "hide-bound"—the result of too frequent rolling with heavy rollers. Price $100, f. o. b. Chicago.



Bendelow Putting-Green Cultivator

Rotary Soil Screens

For quickly and efficiently screening compost for top-dressing turf, also for removing stones and large particles from potting soil, sand, gravel, ashes, rotted manure, etc. Strongly made of heavy woven wire, so well balanced that very little power is necessary to operate them.

Rotary Soil Screens are offered in four models:

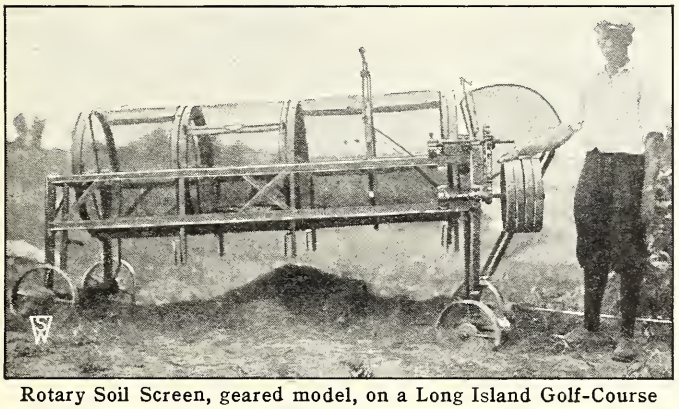
"Rotary" Geared Model. As illustrated below. Furnished with special gearing to connect with any speed engine. **$190.**

"Rotary" Standard Model. Works from any 1½ horse-power engine with a 4-inch pulley wheel running at 500 r.p.m. Identical with the geared model except that it has no chain-gear; the tight and loose pulleys are bolted directly on the driving-shaft. **$170.**

"Junior Rotary" Geared Model. The revolving cylinder consists of one section only instead of three, as in the type shown. The framework is shorter than that of the larger machine, but in other respects it is identical. The capacity is about one-quarter less than that of the larger machine. We ship in ¼-inch mesh unless any other is specified. **$150.**

"Junior Rotary" Standard Model. A one-section type without gearing. **$125.**

All the above are equipped with a crank handle which may be used should your power fail or if you use the machine only occasionally. They are easily revolved by hand. Prices are f.o.b. New York.



Rotary Soil Screen, geared model, on a Long Island Golf-Course

Capacity. Rotary Geared and Rotary Standard models will take care of average soil about as quickly as two men can shovel into the hopper, screening from 1½ to 5 cubic yards per hour, the rate depending, of course, on the condition of the material—moist, heavy soil screens slower than dry, light soil.

Junior Rotary Screens will screen 1 to 3 cubic yards per hour.

Operating. The best source of power is a kerosene engine developing 1½ horse-power with 500 revolutions per minute of a 4-inch pulley wheel. The standard models are built for this speed. All models, however, may be rotated by hand; or for the geared models power may be taken by means of a belt from the rear wheel of an automobile, from a tractor, kerosene engine, or electric motor.

Portability. Seven-inch wheels make the apparatus sufficiently portable to be of service on any part of a golf-course or estate.

Mesh. You may specify any mesh when you order. We recommend ⅛-inch, ¼-inch, and ⅜-inch as the most desirable for the three sections, and we send these unless instructed otherwise. We can supply extra screens at any time; these can be bolted in place in a few minutes. Junior models are shipped in ¼-inch mesh unless specified.

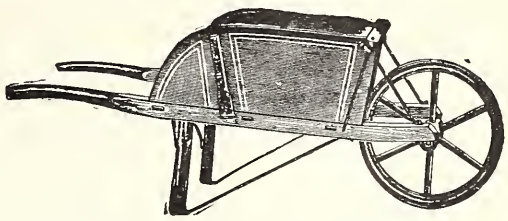
Which Machine to Purchase. We advise the large machine for construction and landscape work and for maintenance on a golf-course; also for commercial florists, contractors, and other users of soil in quantity. We recommend the Junior Rotary Soil Screen for use on private estates.

If you have an engine developing the horse-power indicated above at the specified revolutions per minute, buy the Standard type. If your power is different, describe it to us and order a Geared model.

Portable Engine. We offer an Engine which may be bolted to a stone-boat or to a wheeled carrier suitable for operating the Standard models. Uses kerosene or gasoline. **$75.**

Flat Screens

Handy for compost, soil, sands, gravel, etc. Extra-heavy wire; spruce frames, square mesh. Small size, 25 x 62 in., **$12;** large size, 28 x 66 in., **$14.** State whether ¼- or ½-in. mesh is desired.



S. & W. Co.'s Garden Barrow

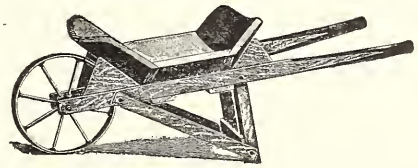
One of the most useful articles on the list of garden and lawn tools. Materials are selected oak, mortised and bolted together, strengthened with six iron braces. Made substantial, light and for long service. Wheels with 3-inch tread.

Size	Front Width	Size of Box		Rear Width	Size of Wheel		
		Depth	Length		Diam.	Tread	Price
Medium	18½ in.	12 in.	26½ in.	23 in.	20 in.	3 in.	$8.00
Regular	20 in.	12 in.	28 in.	24 in.	22 in.	3 in.	9.25

S. & W. Co.'s Boys' Barrow

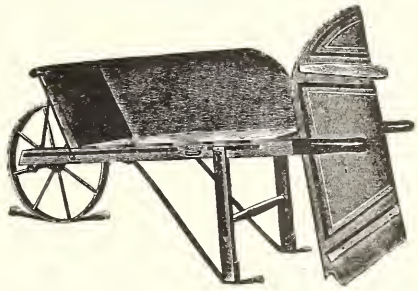
Suitable also for ladies' use. The front width is 15½ inches, box is 9 inches deep and 21 inches long, and the rear width is 18 inches; wheel diameter is 16 inches with 1½-inch tread. Just as substantially made and just as practical as the standard barrow. Price, $6.

Canal Barrow

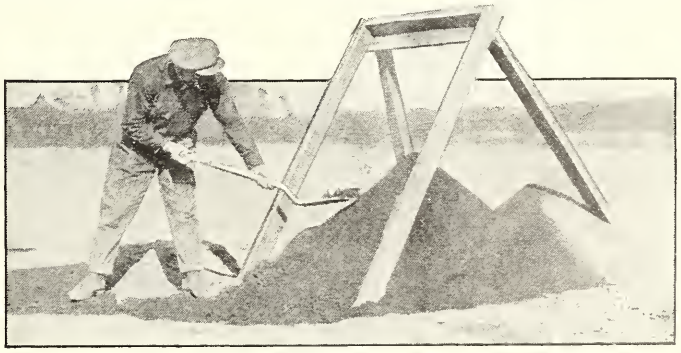


The ideal Wheelbarrow for landscape and golf construction work. The wheel is of steel and the body is strongly made, superior to the ordinary Barrow in common use. Price, $5.

Greenhouse Barrow



This is specially designed to run between the benches of a glass-house and readily to turn corners. Its body is thus constructed narrow, as also is the distance between the handles. Price, $10.



Flat Screen

Garden and Lawn Tools

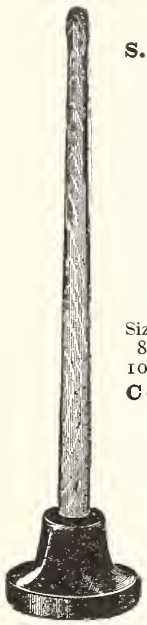
PRICES SUBJECT TO MARKET CHANGES

Tampers

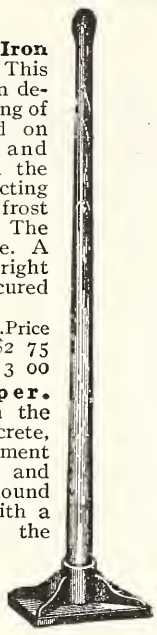
S. & W. Co.'s Iron Sod Tamper. This Sod Tamper is in demand for the laying of sod. It is used on putting-greens and terraces; also in the spring for compacting the sod after the frost has disappeared. The Tamper is square. A wooden handle of right size is firmly secured to the Tamper.

Size, ins.	Weight lbs.	ea. Price
8x8	17....	$2 75
10x10	20....	3 00

Cement Tamper. Largely used in the laying of concrete, brick and cement floors, walks and driveways. Round and equipped with a wooden handle, the same as the sod tamper. 6-in. diam., 16 lbs., $2.75 each; 6-in. diam., 24 lbs., $4 each.



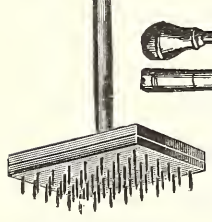
Cement Tamper



S. & W. Iron Tamper

S. & W. Sod Perforator

The best low-priced device for renovating bad spots in lawns, terraces, greens, etc. Before sowing grass seed, use the Sod Perforator. The operation permits the seed to enter the soil, where it is covered with fertilizer or by sprinkling the surface. The seed will germinate and come up uniformly, producing a vigorous growth of rich grass. The spikes are firmly set in an oak block, made in two halves and put together with screws. The handle is the right thickness and length. 12 x 12 in., $4.50.



Sod Perforator

Asparagus Knives

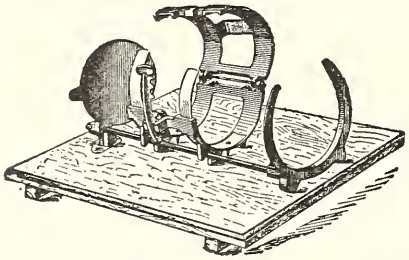
Imported English. Saw-Tooth, Plain. $1.50 each.

Highly Finished. $2 each.

American Asparagus Knives.

Straight-Edge. 50 cts. each, $5.50 per doz.

V-Shape. 50 cts. each, $5.50 per doz.



Acme Asparagus Buncher

No. 1 makes bunch 3 to 3½ in. diam. $4 each.

No. 2 makes bunch 4 to 4½ in. diam. Length, adjustable, 7 to 9 in. $4.25 each.

For Garden Set of Tools, see page 162

Forks

Spading Fork

Spading Forks. Best grade; tines spear-pointed with diamond-shaped backs; handle strapped both sides. Of superior quality and very strong.

	Each
4-tine, D Handle	$2 00
5-tine, D Handle	2 50

Long-Handle Forks, same price.

Manure Fork

Manure Forks. Best grade; strong oval tines.

	Each
4-tine, D Handle	$2 00
5-tine, D Handle	2 15
6-tine, D Handle	2 40

Long-Handle Forks, same price.

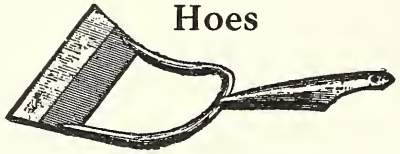
Hay Forks. Best grade; strong oval tines, made only with long handles.

	Each
2-tine, Long Handle	$1 20
3-tine, Long Handle	1 30
4-tine, Long Handle	1 45
Boys' Spading Forks	1 25

Norcross Cultivator Hoe and Weeder

Wherever vegetables, plants and flowers are grown, these modern tools are rapidly replacing the ordinary hoe. They are made in three sizes, and can be used in wide or narrow rows. Will also cultivate both sides of a row at one operation, when the middle prongs are removed. The three-prong weeder is the women's size. They destroy weeds, leave the soil level, loose and untrampled. 5-prong, $1.10; 3-prong, 85 cts.; Midget, 45 cts.

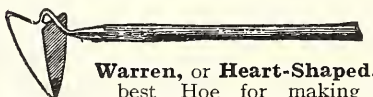
Hoes



English Scuffle Hoe. Imported. Positively the best. The quality of material used and finish is superior to all others.

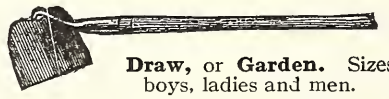
Size	Each	Size	Each
4-in.	$1 00	8-in.	$1 40
5-in.	1 10	9-in.	1 50
6-in.	1 20	10-in.	1 70
7-in.	1 30	12-in.	2 00

Extra-strong handles, 4½ ft., 50 cts.; 6 ft., 80 cts. each.



Warren, or **Heart-Shaped.** The best Hoe for making drills, covering, hoeing, and weeding.

	Each
Small size	$1 25
Medium size	1 50

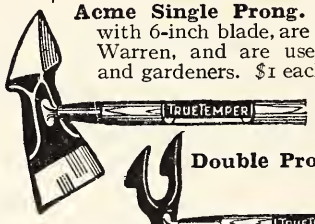


Draw, or **Garden.** Sizes for boys, ladies and men.

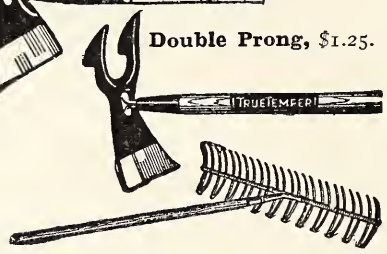
	Each	Doz.
5-in.	$0 90	$9 00
6-, 6½-, 7-, and 7½-in.	1 10	11 00

HOES, continued

Acme Single Prong. Acme Hoes with 6-inch blade, are similar to the Warren, and are used by florists and gardeners. $1 each.

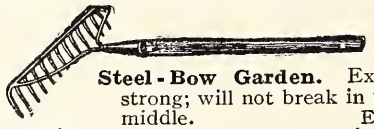


Double Prong, $1.25.



Rakes

Reversible Steel. Suitable for lawn and garden. Has 24 teeth. 75 cts. each.



Steel-Bow Garden. Extra strong; will not break in the middle.

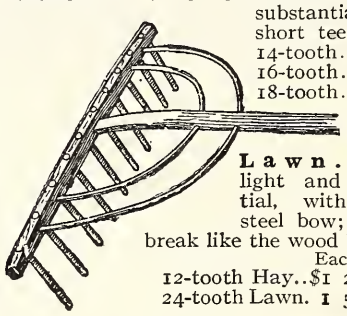
	Each
12-tooth	$1 25
14-tooth	1 40
16-tooth	1 50

Steel Garden. Cut from one piece of steel; strong and durable.

	Each		Each
10-tooth	$0 90	14-tooth	$1 10
12-tooth	1 00	16-tooth	1 25

Steel Gravel. Like the Garden Rake. Made substantial, with short teeth.

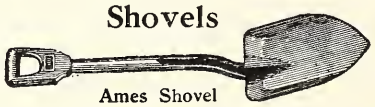
	Each
14-tooth	$1 25
16-tooth	1 50
18-tooth	1 75



Wood Hay and Lawn. Made light and substantial, with tubular steel bow; does not break like the wood bow.

	Each	Doz.
12-tooth Hay	$1 20	$12 00
24-tooth Lawn	1 50	15 00

Shovels



Ames Shovel

Ames Shovels are the best manufactured; give best service.

	Each
Square Point, D Handle	$2 50
Round Point, D Handle	2 60

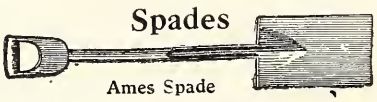
Long-Handle Shovels, same price.

S. & W. Co.'s Shovels.

Square Point, D Handle	$2 00
Round Point, D Handle	2 10

Long-Handle Shovels, same price

Spades



Ames Spade

Ames Spades are the same grade as the Ames Shovels.

	Each
D Handle and Long Handle	$2 50

S. & W. Co.'s Spades are the same grade as S. & W. Co.'s Shovels.

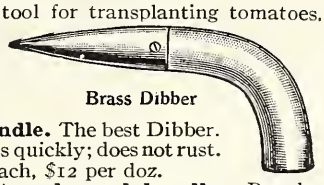
	Each
D Handle and Long Handle	$2 00
Boys' Spades	1 75

Small Garden Tools

PRICES SUBJECT TO MARKET CHANGES

Dibbles or Dibbers

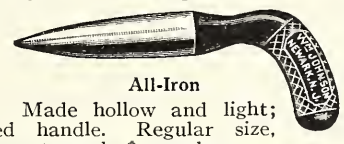
Just the tool for transplanting tomatoes, cabbage, celery, etc.



Brass Dibber

Brass point and wood handle. The best Dibber. Polishes quickly; does not rust. $1.25 each, $12 per doz.

Steel point and wood handle. Regular size, 9¾ in., $1 each, $10 per doz. Small size, 8 in., 90 cts. each, $9 per doz.



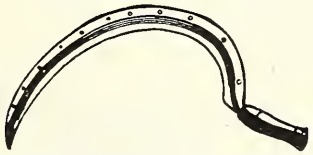
All-Iron

All-Iron. Made hollow and light; japanned handle. Regular size, 9¾ in., 90 cts. each. $9 per doz.

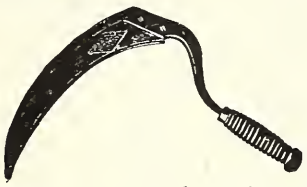
Gem Hand Fork

Has three steel prongs and finished handle. Is a handy Fork for transplanting strawberries, loosening the soil, etc. 50 cts. each.

Grass Hooks



Imported English. With heavy riveted back, thin cutting blade, easy to sharpen; forged from the best-grade steel. No. 2, 90 cts. each; No. 3, $1 each, No. 4, $1.15 each



Blue Ribbon. Tempered steel blade; black-enameled handle. Used also for a Corn Hook and for clipping hedges. Blade can be detached and packed for parcel post. 60 cts. each, 3 lbs., packed.

Grass and Lawn Scythes

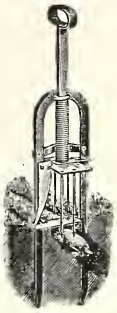
Imported English. Has a riveted back, broad, thin, light blade. Best Scythe for cutting grass, rye, oats, etc.

30-in.	$2 75	34-in.	$3 25
32-in.	3 00	36-in.	3 50

Domestic. Cutlery steel, natural oil finish, cutting edge web and backs polished.

32-in.	$2 00	36-in.	$2 40
34-in.	2 20	38-in.	2 60

Scythe Snath, or **Handle.** The very best, with patent socket. $2.25.



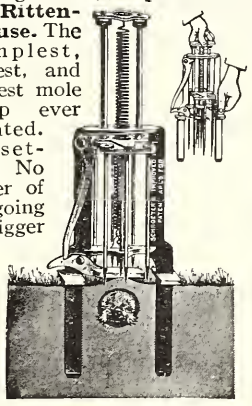
The Rittenhouse

Mole Traps

Schroeder Improved No. 1. It has a rest on top for a weight, also eight sharp prongs and a strong spiral spring. $2 ea., $20 per doz.

The Rittenhouse. The simplest, safest, and surest mole trap ever invented. Self-setting. No danger of its going off unless the trigger is touched. Made of all steel and tinned. Six in a crate. The spears are spring steel, therefore not so long as soft steel. $1.10 ea., $11 per doz.

Reddick's. $1.25 each, $12 per doz.



Schroeder Improved

Line Reel

Garden Line Reels

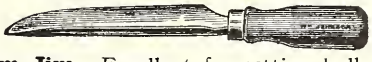
Malleable Iron. Holds 100 feet. $1.25.

Eureka. Galvanized steel. Single, 500 feet size, $3.25. Double, 1,000 feet size, $4.

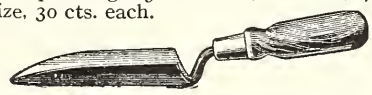
Garden Line

Best Braided Linen. 100 feet, one length, $1.50. 200 feet, one length, $2.75.

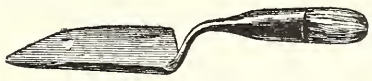
Trowels



Slim Jim. Excellent for setting bulbs or transplanting 5-inch size, 20 cts; 7-in. size, 30 cts. each.



Forged Steel. This trowel is second to the Maynard Trowel in quality and finish. The blade and shank are one piece, forged out of the best of steel. Made in three sizes. 5-in., $1 each,; 6-in., $1.10, 7-in., $1.20.



The Maynard is the best made Trowel. The ferrule and shank, as well as the blade, are forged in one piece. Only the very best material used. 6-in., $1 each.

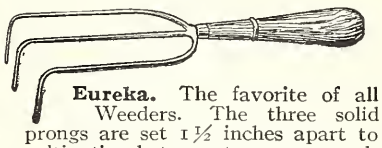
Florists' Steel Trowel

This Trowel is made in one piece of heavy sheet steel. One size only, 6-in., 50 cts. each.

TROWELS, continued

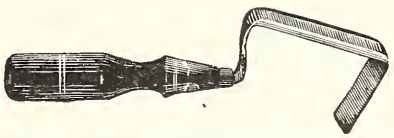
Transplanting. Very handy for transplanting cabbage, tomatoes, etc. Solid steel shank and blade. $1 each, $10 per doz.

Weeders

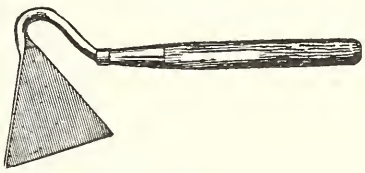


Eureka. The favorite of all hand Weeders. The three solid steel prongs are set 1½ inches apart to allow cultivating between two or more plants at once. Short handle, 60 cts. each. Larger size, 24-inch handle, 70 cts. each.

Excelsior Finger. This five-short-prong Weeder is excellent for loosening the soil in small flower-beds, etc. 35 cts. each, $3.50 per doz.

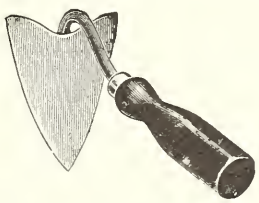


Hazeltine's Hand. Better known as Beet Weeder. A handy tool for weeding between beets, carrots, and all small vegetables and flowers. Made of 1-inch-wide spring steel 75 cts. each, $8 per doz.

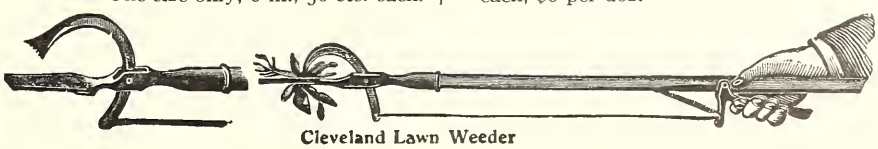


Three-Cornered Onion. For weeding onions, carrots, etc. Also for cleaning between rows. 75 cts. each, $8 per doz.

Cleveland Lawn. Is simple to operate; it not only saves the back, but is actually a pleasure to use. The cut is a good illustration, showing how to work it. $1.50 each, $15 per doz.



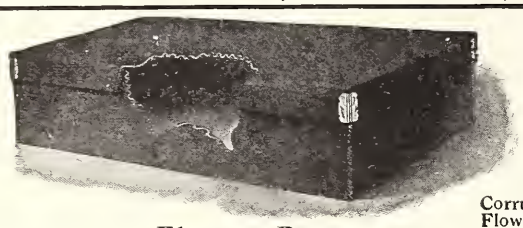
Midget Warren Hoe. Blade and shank forged from the best quality of steel. Handle is turned, polished, and enameled. Excellent for making drills and covering; also for transplanting and weeding. 80 cts. each, $8 per doz.



Cleveland Lawn Weeder

Flower Boxes, Baskets, Pots and Fibreware

PRICES SUBJECT TO MARKET CHANGES



Corrugated Flower Box

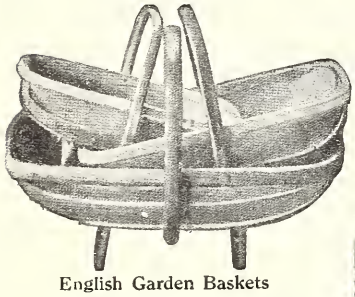
Flower Boxes

Cardboard, Flower. Ivy green; lock corners.

	Depth	Length	Width	Doz.	100
No. 1.	3 in.	18 in.	5 in.	$1 00	$6 00
No. 2.	3 in.	21 in.	5 in.	1 20	7 00
No. 3.	4 in.	24 in.	8 in.	1 60	10 50
No. 4.	5 in.	28 in.	8 in.	2 25	13 00
No. 5.	5 in.	36 in.	8 in.	3 00	16 00
Violet.—	Length	Width	Depth		
No. 5.	11 in.	5½ in.	8 in.	1 30	7 00
No. 10.	9 in.	5 in.	6 in.	1 20	6 00

Corrugated Cardboard. Very heavy and durable; extensively used by florists for shipping cut-flowers.

No.		Doz.	100
A	20 x 7 x 4 in.	$3 50	$25 00
B	28 x 8 x 5 in.	4 50	35 00
C	30 x 12 x 6 in.	6 00	45 00
D	36 x 14 x 8 in.	8 00	60 00
E	48 x 14 x 8 in.	10 00	75 00
F	36 x 12 x 6 in.	7 00	50 00

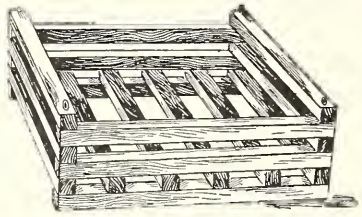


English Garden Baskets

English Garden Baskets

Durable, light and handy for cut-flowers or vegetables.

No.	Length Width	Each	Doz.
2	11½ x 6 in.	$1 00	$11 50
4	15 x 8 in.	1 50	16 00
5	16½ x 9 in.	2 00	22 00
6	18½ x 10 in.	2 25	25 00
7	21 x 11 in.	2 75	30 00
8	23 x 12 in.	3 25	36 00

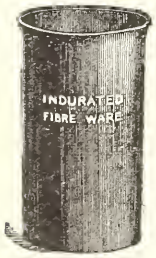


Orchid Basket

Orchid Baskets

Size	Doz.	100
6 in.	$6 00	$45 00
8 in.	7 50	60 00
10 in.	10 00	75 00
12 in.	11 00	100 00

Flower Vases. FIBREWARE. Waterproof



Flower Vase

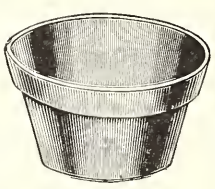
For displaying cut-flowers. Not easily broken, like earthenware; do not rust like metal Vases. Order by number. Inside dimensions are given.

No.	Depth	Diam.	Each	Doz.
0.	13 in.	8 in.	$1 80	$19 00
1.	10½ in.	5½ in.	1 65	17 00
2.	9 in.	4½ in.	1 50	15 00
3.	6½ in.	4 in.	1 30	13 20
4.	5 in.	3 in.	1 00	10 80
00.	21 in.	9½ in.	5 50	60 00
01.	20 in.	7 in.	3 50	36 00
11.	18 in.	6 in.	2 20	23 00
22.	15 in.	4½ in.	2 00	21 00
33.	12 in.	4 in.	1 85	18 60
44.	9 in.	3 in.	1 45	14 50

Azalea Pots

These pots differ from standard flower pots in that they resemble the bulb pans but are deeper. Excellent for growing bulbs for exhibition.

Diam.	Depth	Each	Doz.	100
6 in.	5 in.	$0 20	$1 80	$11 00
7 in.	6 in.	35	3 15	19 00
8 in.	7 in.	45	4 50	28 00
9 in.	7½ in.	65	6 50	39 00
10 in.	8 in.	1 00	10 00	58 00
12 in.	10 in.	2 00	20 00	113 00



Azalea Pot

Flower Pots, Standard

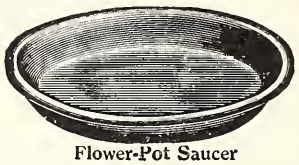
EARTHENWARE. Best on the market

Diam.	Each	Doz.	100	1,000
2 in.		$0 40	$1 60	$14 00
2½ in.		50	2 50	18 00
3 in.		70	3 50	25 00
4 in.	$0 10	1 00	5 50	38 00
5 in.	20	1 75	9 50	70 00
6 in.	25	2 25	13 00	105 00
7 in.	35	3 25	22 00	175 00
8 in.	50	5 00	34 00	250 00
9 in.	1 00	10 00	55 00	380 00
10 in.	1 25	12 00	70 00	520 00

Flower Pot

Saucers of same material, to fit Pots, furnished extra

Diam.	Each	Doz.	100	Diam.	Each	Doz.	100
4 in.		$0 50	$3 00	8 in.	$0 15	$1 50	$10 60
5 in.		60	3 80	9 in.	25	2 50	14 50
6 in.	$0 10	1 00	5 80	10 in.	30	3 00	17 50
7 in.	15	1 30	7 80	11 in.	35	3 50	21 50



Flower-Pot Saucer

Flower-Pot Saucers

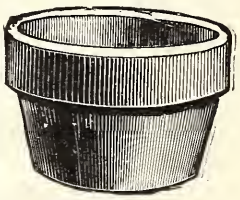
FIBREWARE. Waterproof

Light and not readily broken; have a surface that will not scratch, like earthenware. Order saucer 2 inches larger than the bottom diameter of pot.

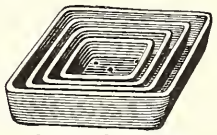
No.	Diam. outside	Each	Doz.	No.	Diam. outside	Each	Doz.
5.	5 in.	$0 30	$3 00	10.	10 in.	$0 60	$6 00
6.	6 in.	42	4 20	12.	12 in.	70	6 80
7.	7 in.	45	4 50	14.	14 in.	95	9 40
8.	8 in.	50	4 90	16.	16 in.	1 70	16 80
9.	9 in.	55	5 40	18.	18 in.	2 00	19 20

Bulb Pans. EARTHENWARE

Diam. at top	Depth	Each	Doz.	100
8 in.	4¼ in.	$0 40	$4 00	$28 00
9 in.	4⅜ in.	60	5 75	42 00
10 in.	4½ in.	80	8 00	58 00
12 in.	4¾ in.	1 65	16 50	118 00
14 in.	5 in.	3 00	30 00	200 00
16 in.	7 in.	5 50	55 00	420 00



Bulb Pan



Square Seed Pans

Square Seed Pans

EARTHENWARE

Size	Each	Doz.	100
6 x 6 in.	$1 10	$10 20	$81 00
8 x 8 in.	1 40	13 20	112 50
10 x 10 in.	1 75	17 00	135 00
12 x 12 in.	2 20	20 50	160 00

Paper Flower Pots, Neponset

Very economical; waterproof; can be nested closely for shipping.

Diam.	Doz.	100
2¼ in.	$0 12	$0 60
2½ in.	15	65
3 in.	20	80
3½ in.	25	1 10
4 in.	30	1 70
5 in.	50	2 50
6 in.	60	3 00

Paper Pot.

Flower-Pot Brackets

Made of steel, artistic in design, finished in black. Saucers are absolutely secured by spring clasp.

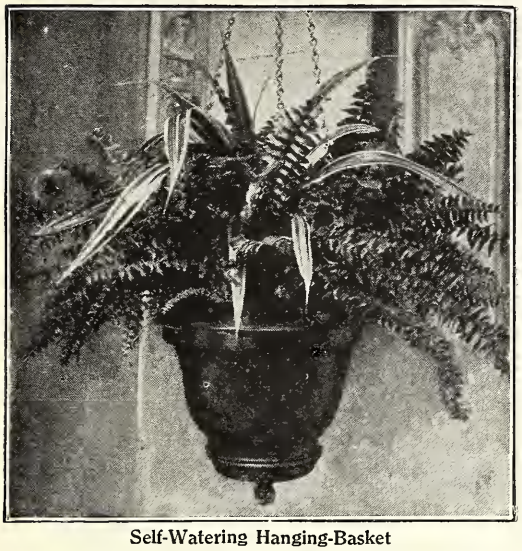
	Each
No. 1. Length of arm, 7 in. Clasp will hold 5-in. pot.	$0 75
No. 2. Length of arm, 8 in. Clasp will hold 6-in. pot.	90
No. 3. Length of arm, 10 in. Clasp will hold 7-in. pot.	1 10

Flower-Pot Handles and Hangers (Krick's Perfect)

	Doz.
No. 0. Will fit from 2- to 3½-in. pots.	$0 60
No. 1. Will fit from 3½- to 5-in. pots.	65
No. 2. Will fit from 5- to 8-in. pots.	70
No. 3. Will fit from 8- to 12-in. pots.	75

Self-Watering Hanging-Baskets and Boxes, Thermometers and Plant-Tubs

PRICES SUBJECT TO MARKET CHANGES



Self-Watering Hanging-Basket

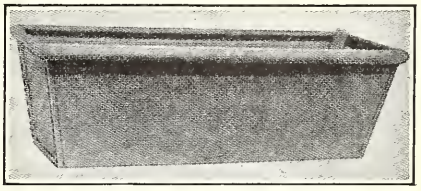
FOR BULBS. Our Self-watering Baskets and Boxes are, without question, the most satisfactory device for growing bulbs ever devised. A beautiful and certain growth, with a minimum of care.

FOR FERNS. Nearly every home-lover is a lover of ferns, but few succeed with them. They never fail in Illinois Self-Watering Flower-Boxes, or Hanging-Baskets.

Self-watering Hanging-Baskets

These Hanging-Baskets are made entirely of heavy sheet-zinc, spun into form and without seams; can be used in a library or parlor or any desired place without danger of damaging the most delicate furniture or fabric, as leaking or dripping of water is absolutely impossible. Filling the water-container is necessary but once a week, and this can be accomplished from the floor without disturbing the basket or using anything on which to stand. A strong, solid brass chain is furnished. Additional chain required charged for at 5 cts. per lineal foot. We also furnish a strong, neat bracket, suitable for hanging-baskets, bird-cages, etc. With screws, 50 cts.

Diameter 8 in. $5 25
Diameter 10 in. 6 50
Diameter 12 in. 7 75



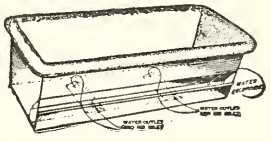
Illinois Self-watering Flower-Boxes

Remarkable for the small amount of attention required. The reservoir in bottom provides the water as needed; it is only necessary to examine the surface of the soil occasionally and, if dry, refill the reservoir. A liberal supply of air to the roots is constantly maintained through the sponges, the soil will always be found mealy and loose, and the moisture is always evenly distributed from top to bottom of soil. Do not refill reservoir unless the condition of the soil shows that watering is needed.

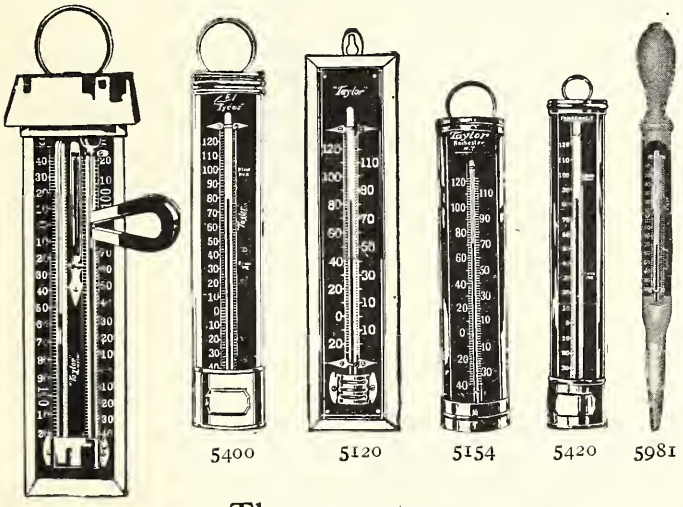
No.	Ht. in.	Wdth. in.	Lgth. in.	Cap. qts.	
1	8	9½	23	2½	$3 25
2	8	9½	25	3	3 50
3	8	9½	27	3½	4 00
4	8	9½	29	4	4 25
5	8	9½	31	4½	4 50
6	8	9½	33	5	$4 75
7	8	9½	35	5½	5 00
8	8	9½	37	6	5 25
9	8	9½	39	6½	5 50
10	8	9½	41	7	5 75

Success Flower-Boxes and Tubs

The Success Flower-Boxes and Tubs are substantially constructed of galvanized sheet steel, locked seamed and soldered water-tight. A water-pocket extends the full length of the box the tubes of which lead into the box itself. This pocket with the tubes serves the following purposes: Provides for watering the roots from below, allowing them to take up moisture as required, provides air circulation and ventilation, keeping the soil sweet and healthy; provides a perfect drainage should the plants be excessively watered by heavy rains or other causes.



	Length	Width	Depth	Each
Flower-Boxes	24 in.	8½ in.	6¼ in.	$1 50
Flower-Boxes	30 in.	8½ in.	6¼ in.	2 00
Flower-Boxes	36 in.	8½ in.	6¼ in.	3 00
Tubs	10 in.	10 in.	7¼ in.	2 00
Tubs	12 in.	12 in.	8¼ in.	2 25
Tubs	14 in.	14 in.	10¼ in.	3 00



5452P 5400 5120 5154 5420 5981

Thermometers

No. 5452P, Self-Registering. (Siexe's Pattern.) Copper case, black brass scale, white figures. **Maximum and Minimum.** 8-inch, $5.50; 10-inch, $6.50. Magnet with each.

No. 5400. Black japanned heavy tin case; brass scale, white figures. (Mercury.) Scale range, 10 to 40 degrees below zero to 120 above. **Standard Grade.** 8-inch, $1.40; 10-inch, $1.60.

No. 5420. Black japanned heavy tin case. For greenhouses. Black oxidized brass scale, white figures. (Spirit.) 8-inch, 90c.; 10-inch, $1.

No. 5154. Copper case; distance reading. Black oxidized brass scale, white figures and graduation. (Spirit.) Scale range, 120 degrees above to 40 degrees below zero. 8-inch 70 cts.; 10-inch, $1.

No. 5120. Distant reading. Wood-back Mission finish, brass scale, white figures and graduation. (Spirit.) Easy to read at distance. 8-inch, $1.25; 10-inch, $1.50.

No. 5981. Hotbed. Wood frame, 16 inches, with point. Brass oxidized scale, white figures and graduations. Best grade, $2.25.

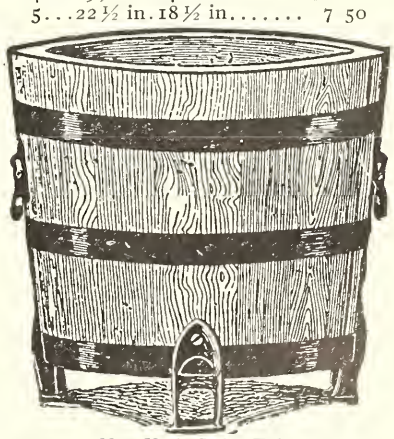
TUBS

Plant-Tubs, New York Cedar. Made of the choicest seasoned cedar, highly finished with black hoops: will last twice as long as cypress.

No.	Diam.	Height	Price
1	12 in.	10½ in.	$2 50
2	13 in.	13 in.	3 50
3	14½ in.	15 in.	4 25
3½	16½ in.	15¼ in.	5 50
4	19½ in.	17 in.	$6 00
5	22½ in.	18½ in.	7 50

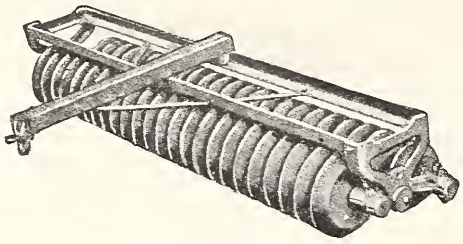
Barclay Tree Tubs. Made of seasoned, selected Virginia White Cedar; bound with electric-welded wire hoops (galvanized), three hoops to each, except the smallest two tubs which have two.

No.	Inside Top Diam. inches	Inside Depth inches	Price Each
1	6	6	$0 70
2	7	7	75
3	8	8	80
4	9	9	90
5	10	10	1 20
6	11	10	1 40
7	12	11	1 60
8	13	12	2 00
9	14	13	2 50
10	15	14	3 00



New York Cedar Tub

PRICES SUBJECT TO MARKET CHANGES

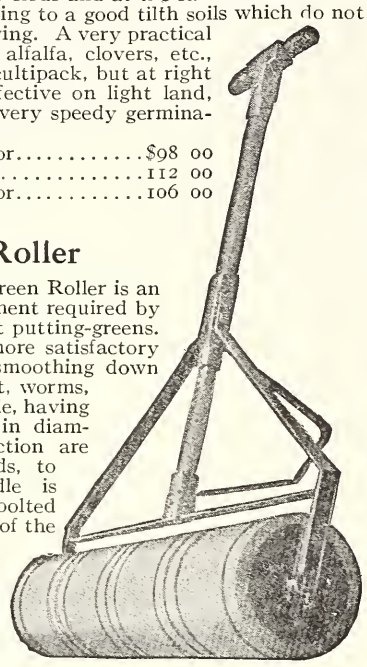


Cultipacker

This implement will break up clods and at the same time firm the soil; it is of great value in reducing to a good tilth soils which do not respond to the harrow after plowing. A very practical method of sowing grass seeds, alfalfa, clovers, etc., is to cultipack, sow, and again cultipack, but at right angles. This is particularly effective on light land, the rolling effect resulting in a very speedy germination.

8 ft. wide, equipped for tractor.....$98 00
8 ft. wide, equipped for horse.....112 00
9 ft. wide, equipped for tractor.....106 00

Putting-Green Roller



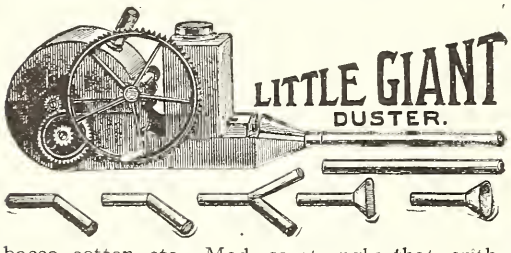
The S. & W. Co.'s Putting-Green Roller is an indispensable part of the equipment required by golf clubs in maintaining perfect putting-greens. This Roller being of wood is more satisfactory for gathering worm-casts and smoothing down all uneven spots caused by frost, worms, ants, etc. The roller is 4 feet wide, having four 12-inch sections, 10 inches in diameter. The ends of each section are banded with 2-inch steel bands, to prevent splitting. The handle is reinforced with steel braces, bolted to solid cast heads on both ends of the roller. The S. & W. Co.'s Putting-Green Roller is endorsed by many of the best golf clubs of America. The net and shipping weight is 186 lbs., $22.50 each.

Wheelbarrow Powder Sower

For an illustration of this we would refer to page 49 of this catalogue. It is identical in appearance with our Wheelbarrow Grass Seeder; in fact, we offer a hopper that is interchangeable with it.

Complete machine for distributing powder only.....$16 00
Special Hopper to use with our Wheelbarrow Seeder..... 11 00
Combination Seeder and Powder Distributor..... 27 00

For an illustration showing this machine at work, our golfing friends are referred to page 115 (April 26, 1922) of the Bulletin of the Green Section of the U. S. Golf Association.



Powder Duster

For applying Dry Bordeaux Mixture, Soot, or Tobacco Dust to lawns, also Paris Green, Arsenate of Lead, etc., to potatoes and other vegetables, tobacco, cotton, etc. Made so strongly that, with average care, the machine will give efficient service for many years. Price, $12.

S. & W. Co.'s Reenforced Nursery Spade

A well-made Spade, being strongly and heavily strapped close up to the "D" handle. For all-round garden work, and will last a lifetime. Price. $2.50.

How Early Birds are kept busy on the country's leading golf-courses

Early Bird Rakes

The Early Bird Putting-Green Rake has been found to be a better, more efficient, and economical implement for cleaning the greens than any yet on the market. It will leave the green smooth and clean. The Early Bird Rake is unqualifiedly endorsed by leading golf professionals, golf-course experts, greenkeepers, and players who appreciate the importance of a perfect putting surface.

We offer it in two sizes.

No. 0A6. Width, 30 in.; weight, 8¼ lbs.....$8 each
No. 0A2. Width 24 in.; weight, 4½ lbs..... 4 each

Little Wonder Hedge Trimmer

A well-designed machine which entirely revolutionizes hedge-trimming. It actually cuts a hedge as fast as you walk, and in an hour will trim the top and two sides of a hedge 300 feet long; this is from five to ten times as fast as hand-work.

The cutting blades are of tough steel, holding a sharp edge for a long while and trimming every variety of hedge grown. Use it for trimming, and not for "cutting back" a hedge, and it will last for years. 30-inch one-man Trimmer $20; 40-inch one-and two-man Trimmer $25; 60-inch two-man Trimmer $30.

George Low Sand Rake

For Traps on a Golf-Course

Invented by one of the best-known golf pros. in the country. Ridges the sand, prevents the ball being teed up in the sand, compels a player to use his niblick instead of rolling his ball with a putter. Gives the traps a wonderful appearance. Price, $2.50, doz. $27.50.

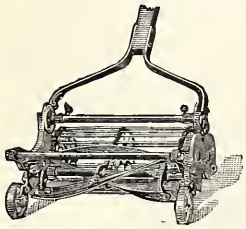
The Complete Garden

A New Book on Landscape Gardening

Tells what, when, and how to plant in any place, for any purpose. Every phase of harmonious landscape architecture and gardening, in a book of more than 400 pages with numerous illustrations. The Complete Garden. By Albert Taylor, M.S.A. $6, postpaid.

Grass Seed and Fertilizer Sowers

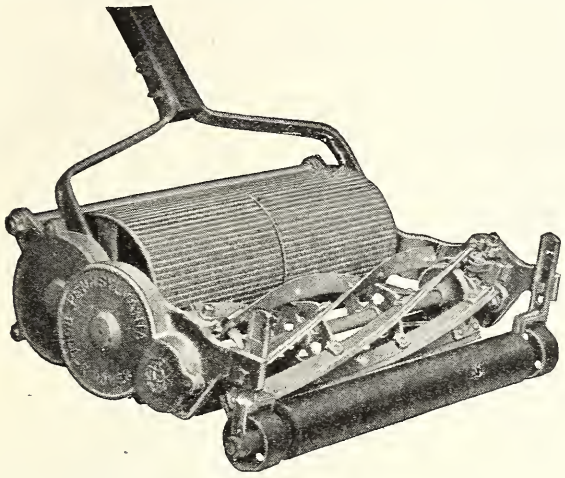
PRICES SUBJECT TO MARKET CHANGES



Easy Lawn Mower

For borders, mounds and terraces

The only Mower made that will cut borders, mounds, terraces, close to walls and fences, and all kinds of uneven surfaces. Advantages: Front Cut. Steel Open Roller. Noiseless in operation. Detachable Handle. Lipped Edge Stationary Knife. Drawcut Wiper Blades. Self-Sharpening. Self-adjusting Ball Bearings. Price, 12-inch, $21; 14-inch, $24, 16-inch $27.



Pennsylvania 7-Inch Roller Mower

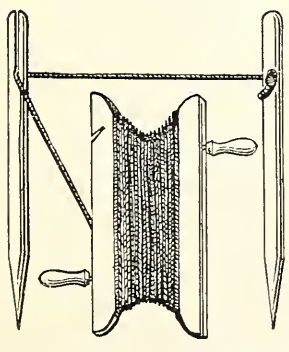
The Pennsylvania 7-inch Roller Mower is substantially constructed of steel, malleable and cast. The parts are accurately machined, insuring an easy running and noiseless Mower. This machine is designed to cut grass on borders, terraces, and undulating greens. It will clip as close as $\frac{3}{16}$ of an inch and cuts satisfactorily where grass is not allowed to exceed 2 inches in height. This Roller Mower has six revolving blades of crucible tool steel, oil hardened and oil tempered.

Size	Gross weight	Net weight	Price	Grass Box
16-inch cut	88 lbs.	66 lbs.	$35 00	$8 00
18-inch cut	94 lbs.	71 lbs.	39 00	8 00

Bamboo Rakes for cleaning lawn, $2 each.

Pennsylvania Ball-Bearing Lawn Trimmer

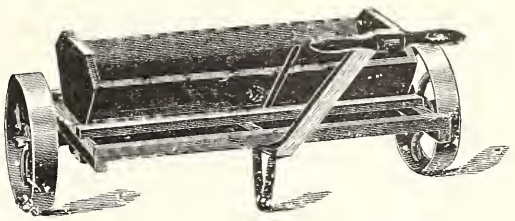
Made to meet the demand for a serviceable tool to take the place of grass shears and other devices for cutting grass left at the edge of lawns, around flower-beds, etc. Will cut to within $\frac{3}{8}$ of an inch of walls, fences, walks, etc., and will mow any border wide enough to run one wheel on. High 8-inch wheel; runs easily; self-sharpening. Width of cut 6 inches; gross weight 26 lbs.; net weight 20 lbs. Price, $11.50.



The Never Tangle Garden Line Reel

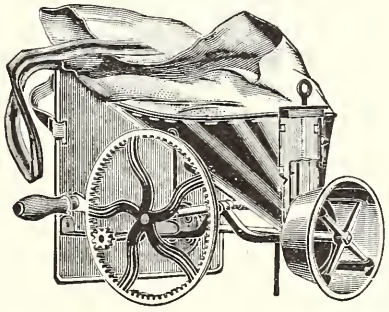
It is practical; the average gardener uses a garden marking line. He ties 150 or 200 feet to two sticks, winds slowly on one of them and puts up with tangles and knots as best he can This Reel will wind or unwind quickly and keep the line straight. It is strongly made, works easily and will last for a long time. Price, 90 cts., postpaid.

See page 166 for Stumpp & Walter Co.'s Ball-Bearing Lawn Mower



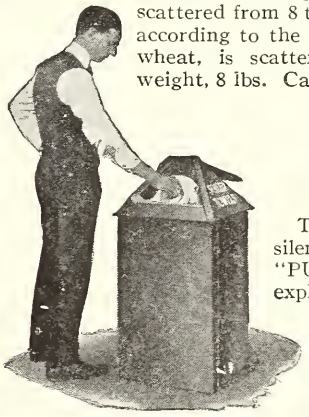
Stevens' Fertilizer Sower for Top-Dressing Lawns

Has the same adjustment as the horse-power machine and will sow all commercial fertilizers. The hopper is 34 inches long and holds one and one-half bushels. Besides top-dressing lawns, greens, etc., it is a handy machine for all kinds of garden and field work. When two blades are removed, it will sow damp sand. Also is an excellent machine in the winter for covering icy roads and walks with sawdust, sand, etc. Shipping weight, 83 lbs. Price, $30.



Cahoon's Improved Broadcast Seed Sower

This is the only Broadcast Seed Sower that has come to stay. It is well known as a practical and cheap broadcaster. Wheat, rye, oats, barley, hemp, timothy, millet and Hungarian grass are used in this Seeder. The operator can sow from four to eight acres an hour, walking at an ordinary gait. The seed is scattered from 8 to 20 feet on each side of the operator, according to the kind of seed. The heavy seed, like wheat, is scattered the greatest distance. Packed weight, 8 lbs. Can be sent by parcel post. Price, $5.25.



Solar Self-Closing Receptacle

The swinging door, so easily operated, silently invites "Put it here." The word "PUSH" on the twin doors immediately explains the method of using when installed. Here is a receptacle for such articles which has the neatness, the dignity, and attractive appearance which blends with the most pretentious surroundings.

No.	Size	Can height	Total height	Each
5.... 9	x 9 in.	13 in.	17½ in.	$5 25
10.... 11½	x 11½ in.	17¼ in.	23⅛ in.	6 25
15.... 11½	x 11½ in.	34 in.	40 in.	9 25
30.... 16	x 16 in.	25½ in.	35⅝ in.	8 90
50.... 21	x 21 in.	36 in.	47⅝ in.	13 00

Miscellaneous Garden Supplies

PRICES SUBJECT TO MARKET CHANGES

Aprons, Gardeners'. English made.

	Each
Fine shallcon, 39-in., with bib and pocket	$4 00
Fine shalloon, 42-in., with bib and pocket	4 50
Heavy serge, 39-in., with bib and pocket	3 75
Heavy serge, 42-in., with bib and pocket	4 25

Heavy Canvas Aprons, $1 each, $10 per doz.

Broom, Bamboo. Excellent for sweeping lawns, putting-greens, and walks. Made of bamboo. $1.50 each, $15 per doz.

Birch Brooms. Superior make, 75 cts. each, $7.50 per doz.; with handle $1.25 each, $12.50 per doz.

Carnation Supports. Model Extension, 2-ring, $1.10 per doz., $7.50 per 100; 3-ring, $1.35 per doz., $8.50 per 100.

Carnation Bands, Rubber. Prevents splitting. 25 cts. per oz.

Clips, Eureka. For fastening rose and chrysanthemum wire stakes. $1.40 per box of 500, $2.25 per box of 1,000.

Corn Knife. For cutting cornstalks or heavy grass. 60 cts. each, $6.50 per doz.

Fumigators. See page 174.

Gloves. Made substantially of horse-hide; heat- and water-proof; made with gauntlets. Good Gloves for pruning and general farm-work.

No. 131. All leather. $2.50 per pair.

No. 186. Ladies'. $2 per pair.

Glazing Materials

Permanite is a glazing compound composed of asbestos fiber and special long-life, weather-resisting, non-drying oils, which always keep it in an elastic condition and never allow it to harden. Little needs to be said about the addition of asbestos as the advantage of using this material—its indestructibility and ability to resist heat and cold—are too well known. 1 gal. $2.50, 5 gals. $2.40 per gal., 15 gals. $2.25 per gal., 35 gals. $2.10 per gal., 60 gals. $2.10 per gal.

Permanite Gun. This Gun makes application of Permanite easy. Further particulars on request. $6.50 each.

Putty Bulb, Scollay. A useful tool similar to the well-known Scollay Sprinkler, with a tube instead of spray for applying liquid putty in glazing greenhouses. $1.50.

Glazing Points, Van Reyper's. No rights or lefts. No. 2, large, for single- and double-thick glass for greenhouses and skylights. Box of 1,000, 75 cts.; 5,000 for $3.25.
Pincers or pliers for same, 50 cts.

Red Devil Glass Cutter. 25 cts., 35 cts., and 50 cts.

Putty Knife. No. 100. A very good tool. 50 cts. each.

Grafting Wax. ¼lb. 20 cts., ½lb. 35 cts., lb. 65 cts.

Knives, Turf-Edging, Budding and Pruning

Solid Welded Steel Edging. Socket handle; made of the very best steel; imported English. 8-inch, $2.50; 9-inch, $3.

Half-Moon. Solid steel, with a polished handle ..... Each $1 25

Planet Jr. Disc Edger 2 00

Pruning—

No.		Each
1.	Cocoa handle. 1 blade.	$1 50
2.	Ebony. 1 blade	3 00
3.	Stag. 2 blades	2 75
4.	Cocoa. 1 blade	2 50
5.	Cocoa. 2 blades	3 25

Budding—

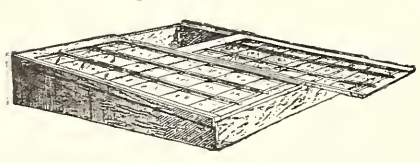
No.		
A.	Ivory handle. 2 blades	$3 00
B.	Bone, S. & W. 1 blade	2 00
C.	Ivory, S. & W. 2 blades	2 25
D.	Ivory. 1 blade	2 50
E.	Ivory. 2 blades	2 75
F.	Bone. 1 blade	1 25

Kunde Knives, Budding and **Pruning.** Two blades; brass lined; polished wooden handle, $3.

Kunde Knives, Budding. One blade; brass lined with polished wooden handle, $2.

Hotbed Sash and Frames

Stumpp & Walter Co.'s Standard Frames are made of selected Gulf Cypress, free from knots and sap. Frames are dressed and finished with two coats of gray paint. The four corners are securely held with angle irons and bolts. Easily taken apart when necessary to store or ship them. The rails between the sash are rabbeted and grooved for drip, and dovetailed into the sides. The back depth of frame is 16 inches, front depth 8 inches. This provides the necessary pitch to carry away rain and snow. Frames are made for 2, 3, 4 and 5 sash When frames for only one sash are desired, we recommend the frames used for half-sash.



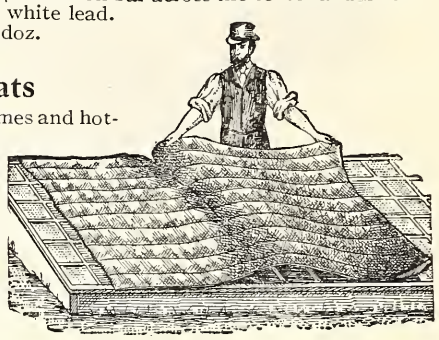
HOTBED SASH AND FRAMES, continued

No. 2 Frame. For two 3 x 6 ft. sash $15 00
No. 3 Frame. For three 3 x 6 ft. sash 21 00
No. 4 Frame. For four 3 x 6 ft. sash 26 00
No. 5 Frame. For five 3 x 6 ft. sash 31 50

Single Light Sash. Stumpp & Walter Co.'s Single Light are standard size, 3 x 6 feet. Made of selected cypress, 1⅜inch thick, free from knots and sap. Mortised and leaded joints. Three rows of 10 x 12-inch double-thick glass, iron cross-bar across the center. Made extra strong and durable. Finished with two coats best white lead $8 each, $90 per doz.

Double Light Sash. Stumpp & Walter Co.'s Double Light or Double-Glazed Sash are made with two layers of glass, providing an air chamber or insulator, which keeps the warmth in and the frost out. With the Double Light Sash it is not necessary to use mats or covering in severe cold weather, thus eliminating the expense of mats and the regularity of covering and uncovering the sash. In locations where snow is frequent or stays long it does not interfere with the Double Light Sash, providing the snow is cleaned off. The plants receive the benefit of the sunlight and grow uninterruptedly. The sash are standard size, 3 x 6 feet, 1⅞inch thick. Made of clean Gulf Cypress, free from knots and sap. Mortised and leaded joints. Three rows of 10 x 12-inch double-thick glass. Strengthened with a ¾-inch iron bar across the center and finished with two coats of best white lead.
$14.50 each, $165 per doz.

Hotbed Mats



For protecting coldframes and hotbeds. Warmly lined with waste wool and cotton, which are quilted in to hold position.

No. 1. 40 x 76 in. Burlap on both sides. $2.50 each, $27 per doz.

No. 1. 76 x 76 in. Burlap on both sides. $3.50 each, $36 per doz.

Simplex Waterproof Plant Labels

The writing is protected by the transparent cover and will last indefinitely if done with lead pencil.

	Doz.	100
No 1. 3 x ½ in.	$0 30	$3 00
No. 2. 4 x ¾ in.	60	6 00
No. 3. 5 x 1 in.	80	8 00

Label Varnish. Waterproofs wooden labels. ½pt. 60 cts., pt. $1.10, qt. $2.10, ½gal. $3.90, gal. $7.50.

S. & W. Co.'s Permanent Label Holder

This Label Holder is finished with an index card covered with mica, making it absolutely rust-proof, finished in iron, galvanized and japanned green. Stake 24 inches high. No. 10 card, 2¾ x 1½ inches 25 cts. each; No. 11 card, 3 x 2 inches 30 cts. each.

Pot or Garden Labels

Wooden—

	Painted 100	Painted 1,000
4-inch	$0 35	$2 00
4½-inch	40	2 25
5-inch	45	2 50
6-inch	60	3 00
8-inch	1 25	9 00
10-inch	1 35	11 00
12-inch	1 60	13 25

Copper-wired—

3½-inch	65	3 00

Zinc Garden. These are unsurpassed, being neat, durable, and indelible. The ink marks a jet-black, which remains distinct. Use a clean quill or pointed stick.

No.		Doz.	100
1.	4¾ x 3½ in.	$0 60	$3 00
2.	4 x 2¾ in.	40	2 00
3.	4 x 3 in.	50	2 00
4.	5 x 1 in.	40	2 00
5.	3½ x 2½ in.	50	2 50
6.	2¼ x 2 in.	$0 35	$1 75
7.	2¾ x ⅞ in.	25	1 25
13.	2¾ x 1¼ in.	30	1 50
14.	1½ x 1¼ in.	30	1 50
15.	4¼ x 4¾ in.	35	1 75

HARDY LILIES

The Lilies offered below are among the best for spring planting. For a more extensive list we refer to our Fall Bulb Catalogue, issued in August. Our list is confined to those varieties we know from actual trials do best, and the following varieties will prove satisfactory if planted by June 1.

Lilies do best in the hardy border or among shrubbery, for the reason that the flowering stems bear masses of roots immediately below the ground surface, and the shady situation helps these roots to better feed the plant; when through flowering, these roots help in the rehabilitation of the bulbs for another season. Any good garden soil with good drainage will do. In planting, cover bulbs at least twice their height, and, if possible, spread 1 inch of sharp builders' sand under the base, so that after the bulbs make basal roots the sand will provide drainage if water-logged in winter. When hard frost sets in, cover with 4 to 6 inches of leaves or litter which should be removed when spring sets in.

Lilium auratum

Golden-Rayed Lily of Japan

The flowers are pure white, thickly studded with crimson spots, while through the center of each petal runs a clear golden band. Fully expanded, the flowers measure nearly a foot across, are produced abundantly from July to September, and possess a most delicious fragrance. 3 to 5 feet.

	Each	Doz.	100
8-in. to 9-in. bulbs	$0 35	$3 50	$25 00
9-in. to 11-in. bulbs	45	4 50	35 00
11-in. to 13-in. bulbs	65	6 50	50 00

Lilium speciosum magnificum

Oriental Orchids

Words cannot describe the beauty of this variety. Frosted white, spotted, clouded and bordered with deep pinkish crimson. A much superior variety to the Roseum, Rubrum or Melpomene of the Speciosum type. For the border, among hardy plants or naturalized among rhododendrons, this is an equal favorite with the handsome *Lilium auratum* offered above. Splendid for pot culture as well. Blooms outside during August.

	Each	Doz.	100
8-in. to 9-in. bulbs	$0 35	$3 50	$25 00
9-in. to 11-in. bulbs	45	4 50	35 00
11-in. to 13-in. bulbs	65	6 50	50 00

Lilium speciosum album

The White Speciosum, which is usually grown with Magnificum and *Lilium auratum*, is a very dainty Lily. It flowers outside in the border or among rhododendrons at the same time as Auratum and Magnificum, and is one of the most extensively cultivated varieties.

	Each	Doz.	100
8-in. to 9-in. bulbs	$0 35	$3 50	$25 00
9-in. to 11-in. bulbs	45	4 50	35 00

Lilium Henryi (The Yellow Speciosum)

A new and very beautiful hardy Lily from northern China. The plants are of vigorous growth, frequently attaining the height of 6 feet. This Lily is noted for its graceful habit and is an unusually excellent bloomer. It is thoroughly hardy, and, when well established, will increase rapidly. Color rich golden yellow, lightly spotted with brown, and in shape quite resembles the Speciosum types. Flowers during August. Choice bulbs, 75 cts. each, $7.50 per doz., $60 per 100.

Lilium Hansonii

Attains a height of 3 to 4 feet. Flowers reddish orange, eight to twelve in a cluster; petals thick and durable; a native of Japan and has always been high in price, but we have a stock of strong, home-grown bulbs that will give splendid satisfaction. Flowers during June. Choice bulbs, 75 cts. each, $7.50 per doz., $60 per 100.

Lilium auratum (Golden-rayed Lily of Japan)

OTHER HARDY LILIES

Suitable for Garden Culture

	Each	Doz.	100
Canadense (Canadian Bellflower Lily). One of the most beautiful native Lilies; flowers bright yellow, with spots of red. Blooms in July and August	$0 20	$2 00	$15 00
Pardalinum. A California variety bearing twelve to thirty flowers on stems 4 to 6 feet high; bright orange, spotted dark crimson. Flowers in July	30	3 00	20 00
Regale (Myriophyllum). The most beautiful Lily, with 2 ½- to 4-foot stems, bearing three to nine large trumpet-shaped white flowers, flushed with yellow, shaded outside with deep brownish pink. Very hardy	85	8 00	60 00
Superbum. In a collection of best plants of all countries, our native Superbum Lily would deserve a first place. In deep, rich soil it often grows 8 feet high, with twenty to thirty flowers. It is of the easiest culture, and may be grown as a wild flower in any swampy or rough part of a place where the grass is not mown. Extra-selected bulbs	30	3 00	20 00
Tigrinum splendens. The finest type of the quaint and much-loved Tiger Lily. Large, selected bulbs	30	3 00	20 00
Tigrinum splendens, Double. The double form of the above	30	3 00	20 00

Lilium speciosum magnificum and album may be had from cold storage for July and August delivery. Write for prices.

GENERAL LIST OF BULBS AND ROOTS

APIOS TUBEROSA (Tuberous-rooted Wistaria)

Clusters of rich, deep purple flowers, which have a strong, delicious violet fragrance. Tubers, 10 cts. each, 75 cts. per doz., $5 per 100.

BEGONIAS TUBEROUS-ROOTED

CULTURE.—A popular method of culture adopted by most amateurs is to provide a pan or box, and cover bottom surface to the depth of say one inch or two with sphagnum moss, placing the bulb immediately on top and then covering with still another layer of sphagnum moss. They should be kept moist and moderately warm. Plant in pots in a light but finely sifted soil, about one inch below the surface, and water cautiously until plant has shown considerable growth, then increase the amount. Good drainage is essential. A finely developed plant might consist of three bulbs planted in a 7-inch pot.

ERECT TYPE (Large Bulbs, 1½ inches and up)

Single-Flowering Varieties

This class of the Tuberous-rooted Begonias is largely used for beds or border-planting.

White	**Orange**	**Scarlet**
Yellow	**Pink**	**Crimson**

35 cts. each, $3.50 per doz., $25 per 100

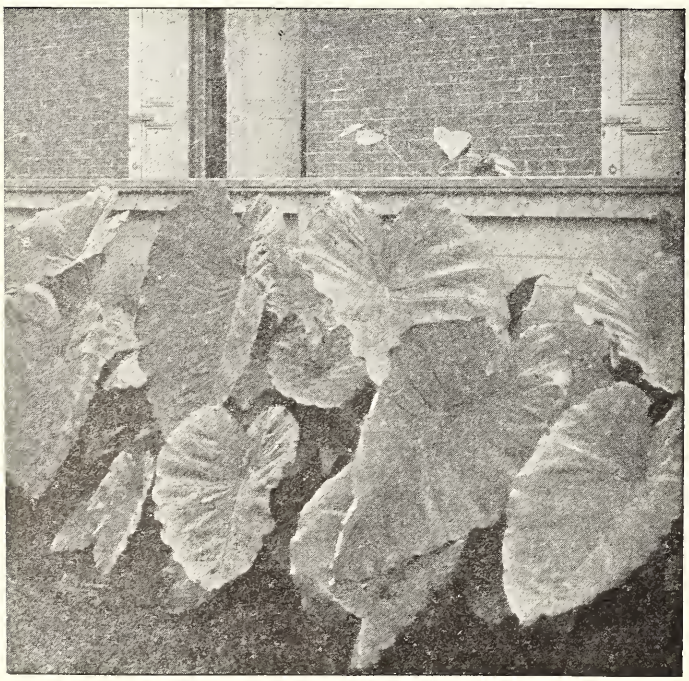
Select mixture of all sorts, equal proportions, 30 cts. each, $3 per doz., $22.50 per 100

Double-Flowering Varieties

Crimson	**Salmon**	**Apricot**
White	**Pink**	**Yellow**

40 cts. each, $4 per doz., $30 per 100

Select mixture of all sorts, equal proportions, 35 cts. each, $3.50 per doz., $25 per 100



Caladium esculentum (Elephant's Ear)

Tuberous-rooted Begonias

Begonias, S. & W. Co.'s Special Mixture

We offer a select mixture of varieties of Tuberous-rooted Begonias which were grown from a famous European strain. The flowers are very large and the color range very interesting—many beautiful tones of salmon, apricot, rose-pink, crimson, etc. We suggest that our patrons grow a few of these. Bulbs, 50 cts. each, $5 per doz., $40 per 100.

CINNAMON VINE (*Dioscorea Batatas*)

A beautiful, rapid-growing summer climber, with bright green, glossy foliage, and spikes of deliciously cinnamon-scented, white flowers. It is perfectly hardy, the stem dying down in winter, but growing with great rapidity in the spring, so as to cover any trellis or arbor very early in the season. Large, select roots, 15c. ea., $1.25 per doz., $9 per 100; mammoth roots, 25c. each, $2.50 per doz., $15 per 100.

CALADIUM ESCULENTUM

Elephant's Ear

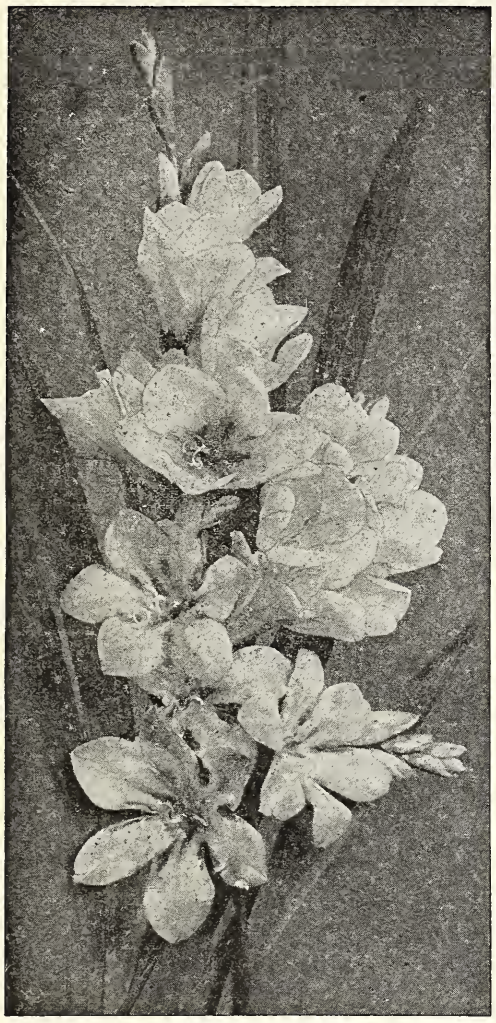
One of the most effective plants in cultivation for beds, borders or for planting out upon the lawn. Very frequently used as border plants about suburban residences, where their large, rich green leaves afford an excellent embellishment when contrasted with the colors of the dwellings. Leaves often measure 3 to 4 feet long and 2½ feet wide. Bulbs do best if planted outdoors in this latitude, about June 1.

	Each	Doz.	100
First-size Bulbs	$0 20	$2 00	$10 00
Large-size Bulbs	25	2 50	15 00
Mammoth-size Bulbs	40	4 00	30 00
Jumbo-size Bulbs	60	6 00	45 00

GLOXINIAS

This is, perhaps, one of the handsomest of summer-blooming, tuberous-rooted plants and should be grown more by the amateur than it has been. As a pot-plant for the window-garden it is grand. The main points to observe are, proper care in watering, good drainage and properly mixed soil. The cultural directions given for Begonias might also be followed for starting and growing Gloxinias. One bulb is usually used for a 4-inch pot.

S. & W. Co.'s Gloxinia erecta grandiflora. We have developed a special strain of these from seed which we offer in mixture only. The tubers are first-class, selected stock. The colors range through pink, scarlet, crimson, white, dark violet, and white bordered blue. **40 cts. each, $4 per doz., $30 per 100.**



Montbretia, Germania

MONTBRETIAS

The Montbretias are one of the brightest of our summer-flowering bulbs, and deserve to be planted extensively. The bulbs should be set out during April or May, 3 to 6 inches apart, in clumps of a dozen or more. They should be protected during the winter with a heavy covering of leaves or litter.

SIX NEW GIANT-FLOWERING VARIETIES

The following six varieties of new, giant-flowering Montbretias should be grown by everyone desiring the best. The type is so distinct from existing kinds as to justify recognition as an entirely new race. The flowers are held erect, sometimes as much as 4 inches across, and are borne on stems 3 or 4 feet high.

Fire King. Splendid glowing scarlet-red, decidedly one of the most beautiful and compares favorably with any of the new and more expensive sorts. 15 cts. each, $1.25 per doz., $7.50 per 100, $70 per 1,000.

George Davidson. A splendid Montbretia. The stems are 3 to 4 feet high, eight- to ten-branched, bearing lovely, pale orange-yellow flowers 3 inches across; among the first to flower, and makes a glorious show in the garden. 20 cts. each, $2 per doz., $10 per 100, $90 per 1,000.

Germania. Grows from 3 to 4 feet high, producing graceful, free-branching flower-spikes, bearing very large, widely expanded flowers 2 to 3 inches across. The color is a rich, glowing orange-scarlet, with red throat. 15 cts. each, $1.25 per doz., $7.50 per 100, $70 per 1,000.

King Edmund. A very strong grower. The flowers are of large size, and of a rich golden yellow, with brown markings in the throat. 15 cts. each, $1.25 per doz., $7.50 per 100, $70 per 1,000.

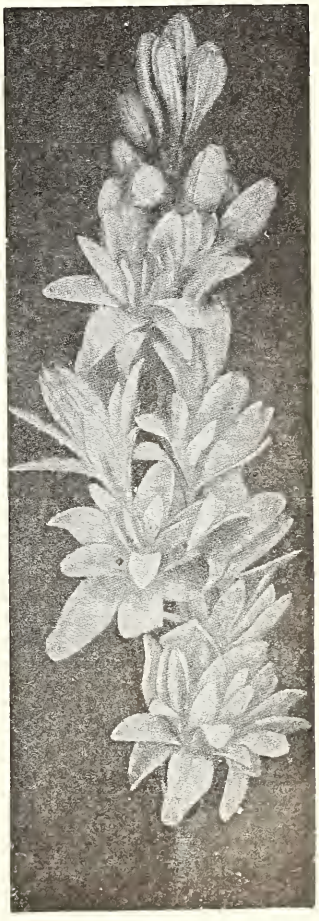
Messidor. A variety of recent introduction. The flowers are of a pale yellow color and it is a tall grower. 25 cts. each, $2.50 per doz., $15 per 100.

Westwick. Distinct orange-red with a clear yellow eye surrounded by a circle of maroon. 15 cts. each, $1.25 per doz., $7.50 per 100, $70 per 1,000.

CALLAS (Richardia)

The varieties offered below succeed best when treated in the same manner as gladioli, tuberoses and other summer-flowering bulbs. They should be planted in the open border in a dormant condition when danger from frost is over in spring, and will then flower during the summer months. When the tops are killed by frost in the autumn, dig and store through the winter as you would potatoes.

Golden Yellow (*Richardia Elliottiana*). This is the best of the Yellow Callas, its flowers being as large as the popular white winter-flowering variety, and of a rich, lustrous golden yellow of velvety texture; the foliage is dark green, with a number of translucent creamy white spots, which add much to its beauty. Strong bulbs 50 cts. each, $5 per doz., $40 per 100.



Tuberose

HYACINTHUS CANDICANS (Summer Hyacinth)

Luxuriant, free-growing summer-flowering plant; spreads 2 to 3 feet, throwing up great, tall spikes, 4 to 5 feet in height, each bearing twenty to thirty large, white, bell-shaped flowers. From our own personal trials we desire to advise our patrons against so-called "Jumbo" bulbs of this delightful plant, as this size frequently decays in the center after being planted. Choice bulbs, 15 cts. each, $1.50 per doz., $10 per 100.

MADEIRA VINE (Climbing Mignonette)

A beautiful and popular vine, covering a large space in a short time. Fleshy heart-shaped leaves of a light green, and numerous racemes of feathery flowers of delightful fragrance. Protect with litter in this latitude. 15 cts. each, $1.50 per doz., $10 per 100; by mail, 15 cts. per doz. extra.

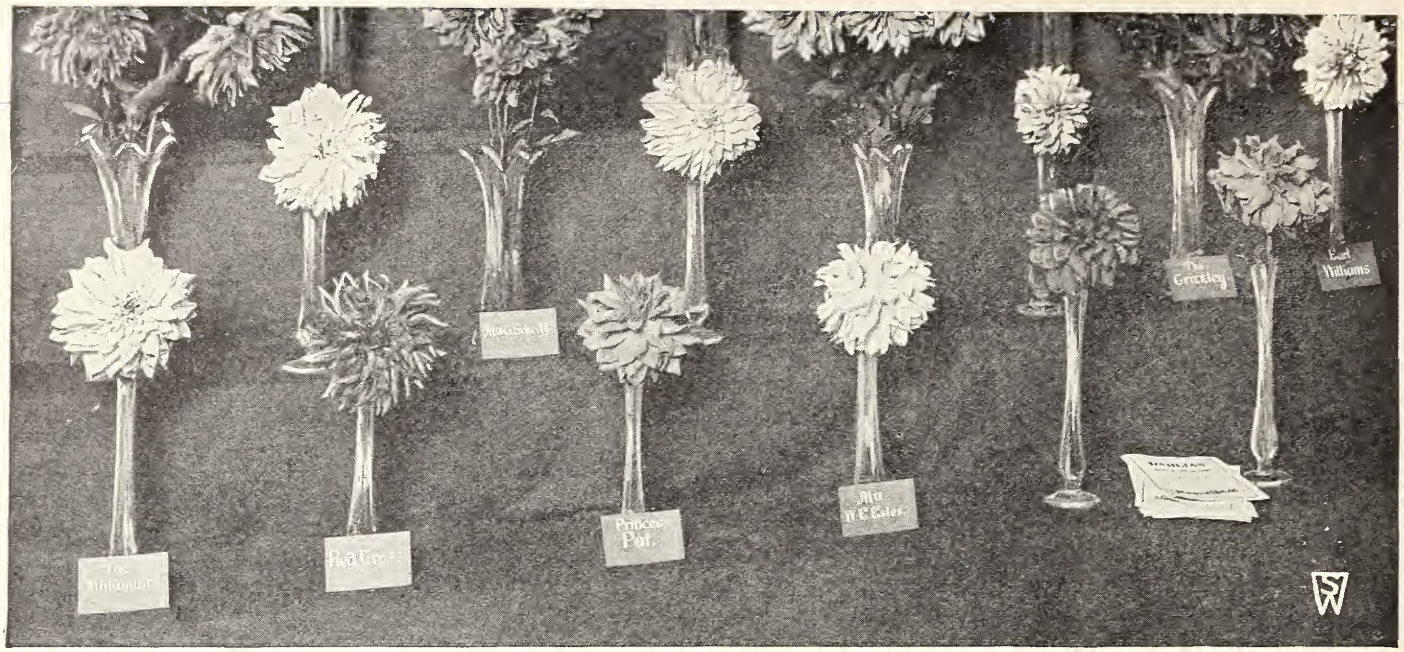
TUBEROSES

One of the most delightfully fragrant and beautiful of the summer-flowering bulbs. By skillful management a succession of flowers may be obtained all the year round. For early flowers they can be started in February or March in the greenhouse or hotbed; and for a succession they can be planted at intervals as late as July. For flowering in the open border, plant about the middle of May, or as soon as the ground becomes warm.

Excelsior Double Pearl. Pure white, double-flowering Tuberose.
First-size Bulbs, 10 cts. each, $1 per doz., $6 per 100.
Jumbo Bulbs, 15 cts. each, $1.50 per doz., $10 per 100.

Albino. A single white variety blooming in July or August. Not as well known as the Double Pearl, and the odor is not as pronounced. 10 cts. each, $1 per doz., $6 per 100.

Plant a few Golden Yellow Callas in your garden this year



One of the principal features of our store policy is to exhibit, from time to time, displays of the newer and more improved varieties of flowers. The above illustration was taken from a photograph of our Store Exhibition during Dahlia-time. We exhibited as many as 100 of the better and newer Dahlias

NEW AND RARE EXHIBITION DAHLIAS

We have selected the following eighteen varieties of Dahlias as being among the best of those of new and recent introduction, **and offer strong tubers for early spring delivery.**

Amun Ra. **(Decorative.)** A Dahlia of unusual color. Coppery bronze, shading to gold and amber. The flowers are flat, with rounded petals and the long, sturdy stems carry them royally. A notable addition to the list of good new varieties. **$5 each, $50 per doz.**

California Gold. **(Decorative.)** An enormous, perfectly formed Decorative of pure, glistening gold. The flowers carried aloft on long stems. Very free flowering. With scarcely any disbudding can be grown 9 to 10 inches across. **$3.50 each, $35 per doz.**

Charm. **(Decorative.)** One of the newer Decorative Dahlias of sterling merit. The color is a pleasing shade of burnt-orange shaded yellow. Fine, strong grower and a good exhibition variety. **$4 each, $40 per doz.**

Dakota. **(Giant Decorative.)** This variety was very prominently displayed at the autumn Dahlia shows this year. It is of splendid habit, and the blooms are held erect on strong stems. The color is, perhaps, best described as flame. **$4 each, $40 per doz.**

Dr. H. L. Tevis. **(Giant Decorative.)** One of the California Giant varieties which has been exhibited quite extensively this past fall and has been greatly admired. The color is a blending of copper, old-rose, and gold. Flowers are borne well above the foliage. **$1 each, $10 per doz.**

Earl Williams. **(Giant Decorative.)** This giant flowering Decorative Dahlia attracted considerable attention at Dahlia shows this year. The color is a combination of brilliant crimson and white. One of the finest and most attractive of the newer varieties. **$2.50 each, $25 per doz.**

Effe May Walter. **(Hybrid Cactus.)** A Hybrid Cactus Dahlia of beautiful color and petal formation. The color, while rather difficult to describe, might best be called a beautiful raspberry shade that seems to be blended with old-rose; toward the center of the flower there is a blending of dull yellowish salmon that seems to have a faint suggestion of dull brown. In size it is medium to fairly large, and while it could never be put in the giant-flowering class, even through heavy disbudding, anyone who really enjoys a beautiful Dahlia will appreciate that the color and the formation of the flower are very much more important than huge size, which many growers do not consider an asset for a cut-flower Dahlia. The bush is a strong grower, with beautiful foliage that is somewhat different from the average Dahlia, and the buds are produced so plentifully that the plant should be disbudded. **$5 each, $50 per doz.**

Emperor. **(Decorative.)** An exceptional variety. Its enormous size, beautiful deep color, the perfect form of the flower, and the extra-long stem, make this a magnificent prize-winner of the highest quality. It is a maroon of the finest type. The flower is made up of long, flat petals, and the color is so intense it does not spot under any weather conditions. **$4 each, $40 per doz.**

George Walters. **(Hybrid Cactus.)** A Dahlia we can highly recommend for all purposes, proving an exceptional garden variety, unexcelled for house decoration, and one of the most dependable for exhibition purposes. A variety of exquisite coloring, being a bright salmon-pink, artistically suffused old-gold. It has won the gold medal and first prize in several instances for the largest specimen flower at the exhibition. **$1 each, $10 per doz.**

Insulinda. **(Decorative.)** This variety, which proved quite scarce in supply for several years, is always very much admired on account of its fascinating autumnal color. It is probably best described as a deep warm Havana brown. The flowers are borne upright on strong, stiff stems. **$1.50 each, $15 per doz.**

Judge Marean. **(Decorative.)** Very large flower of perfect Decorative type. The color is rather difficult to describe, being a combination of salmon-pink, orange, and gold. **$4 each, $40 per doz.**

Mrs. Carl Selbach. **(Giant Decorative.)** Few varieties among the newer creations of the Dahlia enthusiasts meet with greater favor than this splendid Dahlia. The flowers are of gigantic size and perfect form and the color is a beautiful shade of lavender. **$1.50 each, $15 per doz.**

Mrs. G. Scheiff. **(Decorative.)** A rare Dahlia that we can highly recommend. An exquisite blending of apricot, orange, and yellow, with reverse of petals coral-red, the unopened central and twisted petals showing the coral-red prominently, making a very unusual and attractive flower. **$3 each, $30 per doz.**

Mrs. I. de Ver Warner. **(Decorative.)** A refined deep mauve-pink Dahlia, of perfect form, impressive on account of its size and beautiful orchid color. It is an abundant bloomer, splendid for exhibition and fine for the garden. **$5 each, $50 per doz.**

Osam Shudow. **(Decorative.)** Large, loose-petaled flowers of old-rose and lilac, with faint yellow shadings. Sturdy stems carry the flowers well above the foliage. **$2 each, $20 per doz.**

Shudow's Lavender. **(Decorative.)** We consider this one of the most pleasing and refined Dahlias of recent introduction. A splendid Decorative type, of a uniform silvery lavender color; very lovely under artificial light. Splendid exhibition variety. **$5 each, $50 per doz.**

The Millionaire. **(Giant Decorative.)** The color of this much-admired Dahlia is a pleasing shade of lavender with a faint pink cast overshading. The flowers are of gigantic size, frequently measuring 10 to 12 inches across, and of unusual depth. **$1.50 each, $15 per doz.**

U. S. A. **(Decorative.)** A Dahlia of exceptionally fine formation, and deep orange color. **$2.50 each, $25 per doz.**

SELECT GARDEN DAHLIAS

We have listed below our selection of a choice list of varieties of Garden Dahlias, some of which were listed under our new and rare varieties of previous years and which, on account of larger stocks, may be obtained at more moderate prices.

Attraction. (**Hybrid Cactus.**) A gigantic Hybrid Cactus Dahlia that is one of the best cut-flower sorts to date. An elegant deep full flower of a clear lilac-rose. The habit of the plant is perfect, with long stems, as stiff as a cane, holding the bloom high and upright. **$1 each, $10 per doz.**

Bianca. (**Hybrid Cactus.**) A garden Cactus of superior qualities, heralded from Holland, and we recommend it as one of the finest cut-flower Dahlias in existence. It is of true Hybrid Cactus type, with every good habit of a Dahlia. The plants are strong and sturdy, and this variety can always be depended upon to blossom each year, continuously and abundantly. Its coloring is a beautiful rose-lilac with a shading of white and a blending of yellow at base of each petal. **$1 each, $10 per doz.**

Carmen Sylva. (**Decorative.**) A very pretty shade of salmon-pink. The flowers, though of medium size, are exquisitely perfect as to shape. The tall erect stems render this variety excellent for cut-flower purposes. We recommend it strongly. **$1 each, $10 per doz.**

Dream. (**Giant Decorative.**) A very beautiful shade of salmon, blending to amber. The plants are tall and healthy growers, producing their blossoms on strong, stiff stems, well above the foliage. This variety was considerably admired where exhibited at the Dahlia shows this past season. **$1 each, $10 per doz.**

Frank A. Walker. (**Decorative.**) This Decorative Dahlia should be grown by every lover of flowers as it is always in blossom, making it a general favorite. It is usually the first Dahlia to bloom, the plants flowering when between 2 and 3 feet in height. In color a charming shade of deep lavender-pink, almost a pure lavender. It is a pleasure to recommend this Dahlia. **35 cts. each, $3.50 per doz.**

F. W. Fellowes. (**Cactus.**) We consider this one of the best Cactus varieties ever raised. The flowers are of unusual size for the long, narrow-petaled type, of which this is one of the finest examples. In color it is an intense coral-red with deeper suffusion toward the center. A leader in this type at all Dahlia exhibitions or for the garden. Excellent as a cut-flower. **$1 each, $10 per doz.**

Kalif. (**Hybrid Cactus.**) A truly majestic flower, frequently measuring over 9 inches in diameter. The flower is of perfect Hybrid Cactus form, and in color a beautiful pure deep glowing scarlet. Its flowers are produced freely and held erect on strong stems of wiry stiffness, making it a most useful variety for cutting as well as for garden decoration. **$1 each, $10 per doz.**

King of the Autumn. (**Decorative.**) A Holland Dahlia that has already gained a world-wide reputation as a cut-flower sort. The coloring is something quite new and unique—a buff-yellow suffused terra-cotta. The habit of the plant is absolutely perfect, with strong, sturdy stalks and long, stiff stems. Although classed as a Decorative Dahlia, over 90 per cent of the flowers usually come semi-double, showing that beautiful golden yellow so characteristic of the Peony-flowered Dahlia, which adds an additional charm to the flower. **$1 each, $10 per doz.**

Mrs. George Stumpp. (**Decorative.**) One of our own introductions and considered one of the finest new Decoratives. The flowers are of great depth, of true Decorative form, and vary from 5 to 8 inches in diameter. In color they are of a delightful autumn shade—an exquisite blending of yellow and fawn. The plants are strong, sturdy growers, with rigid stems, and produce blooms continuously. **$2.50 each, $25 per doz.**

Mrs. W. E. Estes. (**Hybrid Cactus.**) We consider this the finest white Hybrid Cactus Dahlia of recent introduction. The flowers are snow-white, of large size, and are borne on long, stiff stems. A splendid exhibition variety. **$2 each, $20 per doz.**

Nibelungenhort. (**Hybrid Cactus.**) A rare variety that is prized by all who know it, and one it is a pleasure to possess. Another gigantic flower of great value, both for exhibition and garden purposes. In color it is a very beautiful shade of old-rose, with a blending of salmon-pink and golden apricot. The flowers often measure 8 inches in diameter and are of perfect form. **$1 each, $10 per doz.**

Pride of California. (**Giant Decorative.**) Considered by many Dahlia enthusiasts as the most brilliant of the new Dahlias. The flowers are of large size, perfect in form, and of a glowing cardinal-red. The finest of the dark rich crimson decorative Dahlias for all purposes. **$1 each, $10 per doz.**

Princess Pat. (**Giant Decorative.**) A Dahlia of splendid form, producing magnificent large flowers 9 to 10 inches in diameter. The color is a most pleasing shade of old-rose, the center suffused with lavender or mauve, the flowers lighting up splendidly under artificial light. **$1.50 each, $15 per doz.**

Red Cross. (**Hybrid Cactus.**) A very attractive variety on account of its striking combination of color, which perhaps is best described as a golden bronze blending to red at the tips of the petals. The plants are strong growers, reaching a height of 6 feet, and the large, well-formed flowers are borne on long stiff stems. **$1.50 each, $15 per doz.**

Splendid decorative effects can be obtained by using various types of Dahlias as illustrated above

SELECT DECORATIVE DAHLIAS

We offer below 18 fine standard varieties of Decorative Dahlias, which can now be had at moderate prices.

Ayesha. We consider this a splendid Decorative variety in its color. The flowers are large and exquisitely formed and of an even shade of soft pure yellow. The best yellow of this type. **50 cts. each, $5 per doz.**

Clifford W. Bruton. Thought by many to be the best canary-yellow Decorative yet introduced. It is an early and continuous bloomer, with flowers borne well above the foliage. **35 cts. each, $3.50 per doz.**

Delice. One of the best-known cut-flower Dahlias in the world, and, unquestionably, the brightest pink. The blooms are of good size, and stand well above the foliage. A charming bright pink, suffused with lavender-pink. **35 cts. each, $3.50 per doz.**

D. M. Moore. In this offering we have the best near-black Dahlia to date. It is a rich, deep, velvety Victoria-lake, which is a shade deeper than deep maroon. A mammoth flower that is always a favorite. **50 cts. each, $5 per doz.**

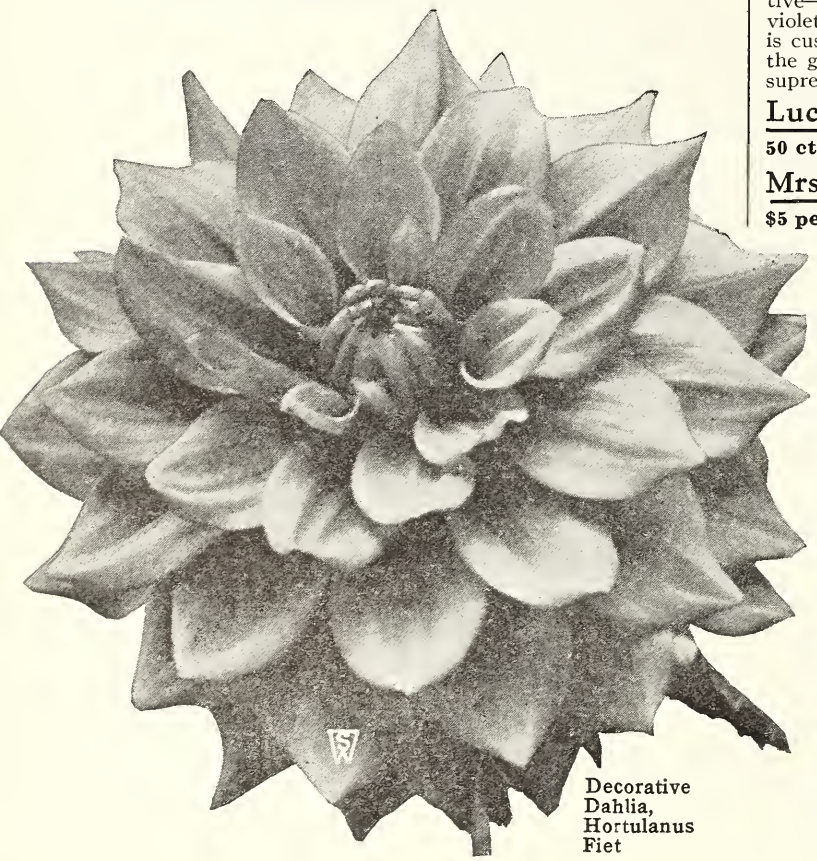
Eveque. An elegant, bright purplish violet flower, always held erect on long stems. **$1 each, $10 per doz.**

Jack Rose. The brilliant crimson-red flowers are the same shade that is responsible for the great popularity of the "Jack" rose. The best crimson for garden and cutting. **35 cts. each, $3.50 per doz.**

Hortulanus Fiet. The coloring of this variety is exceedingly wonderful, and it is, without doubt, the very largest and finest of its color. A beautiful shade of salmon with dainty blending of yellow at base of petals toward the center. **75 cts. each, $7.50 per doz.**

Jane Selby. A prize-winner. Flower of delicate mauve-pink, of great substance and fine formation, borne on erect stems, well above the foliage. **$1 each, $10 per doz.**

Jeanne Charmet. The large flowers, 7 to 10 inches across, are carried on stiff, wiry stems, often 1½ to 2 feet long. In color they are an exquisite lilac-pink, shading to white at the center. **35 cts. each, $3.50 per doz.**



Decorative Dahlia, Hortulanus Fiet

Decorative Dahlia, Souvenir de Gustave Doazon

Le Grande Manitou. The color combination in the blooms of this superb variety is very attractive—pure white, artistically striped, splashed, and blotched deep violet-purple. The plants occasionally produce all purple flowers, as is customary with all variegated varieties. The effect produced by the gigantic flowers of this variety is most phenomenal, giving it a supreme place in this class. **50 cts. each, $5 per doz.**

Lucero. Bronzy buff, with a carmine flush of a deeper tinted center. Very long stems; exceptionally free-flowering. **50 cts. each, $5 per doz.**

Mrs. C. J. Mills. A very fine dark velvety maroon Dahlia of good form and free-flowering. **50 cts. each, $5 per doz.**

Mina Burgle. The finest scarlet Decorative Dahlia in existence, if not the finest scarlet of all Dahlias. This California introduction is one of the best Dahlias to date, a champion variety producing flowers of large size and remarkable beauty, in color, a glowing and most brilliant scarlet. **50 cts. each, $5 per doz.**

Oregon Beauty. Flowers of very large size, appearing like giant balls of rich deep red. They are so heavy that the stem is somewhat pendent, but so large that everyone admires this creation, and after they have once seen it, would not be without it. In color they are glowing fiery scarlet. **50 cts. each, $5 per doz.**

Patrick O'Mara. An unusually soft and pleasing shade of orange-buff, slightly tinged Paul Neyron rose. Good keeping qualities. **$1 each, $10 per doz.**

President Lincoln. Deep lavender, almost purple; fine form and habit. **$1 each, $10 per doz.**

Princess Juliana. A splendid Decorative Dahlia from Holland, and considered by many as the finest white cut-flower Dahlia. It has long, stiff stems, produces its flowers fully upright, and makes a good showing in the garden. **35 cts. each, $3.50 per doz.**

Souv. de Gustave Doazon. This variety is a good comparison to the sunflower. It is the largest Dahlia in existence, and the color is a pleasing shade of red. The flowers are full to the center, and often measure 9 inches and over in diameter, and can be forced to measure 12 inches. **35 cts. each, $3.50 per doz.**

CHOICE CACTUS DAHLIAS

We offer below a choice list of Cactus Dahlias which have proven to bloom well under varying conditions. They are all excellent cut-flower varieties as well as splendid varieties for garden decoration. While numerous Dahlia enthusiasts are growing the Decorative type of Dahlias on account of their massiveness, the Cactus Dahlia is still preferred by many flower-lovers on account of its artistic appearance.

Conquest. Deep, rich crimson. Large, graceful flower; very good grower and free flowering. **$1 each, $10 per doz.**

Countess of Lonsdale. The best-known and most desired of all the Cactus Dahlias. It is of the older Hybrid Cactus type, with broad, straight-pointed petals and is a very abundant and continuous bloomer. If only one Cactus Dahlia could be had, ninety-nine people out of a hundred would select this one. A deep salmon-red in color. **35 cts. each, $3.50 per doz.**

Ella Kramer. The deep rose-pink petals of this Dahlia are moderately incurved and become much brighter in color at the center. One of our choicest varieties, producing a profusion of well-formed flowers. **35 cts. each, $3.50 per doz.**

Etendard de Lyon. Rich carmine-rose. The large flowers are distinct in shape, with broad, curling, wavy petals. **75 cts. each, $7.50 per doz.**

Golden Gate. Rich, bright yellow. A very free-flowering variety, borne on long, stiff stems. **35 cts. each, $3.50 per doz.**

J. H. Jackson. The finest black Cactus Dahlia in existence. An exceptionally satisfactory all-round Dahlia and one of the most prominent for garden decoration. **35 cts. each, $3.50 per doz.**

Kriemhilde. This is a particularly good variety for cutting as its flowers are very lasting. The deep cerise-pink blooms pass to creamy pink at the center. **35 cts. each, $3.50 per doz.**

Libelle. A particularly attractive rose-purple variety, with long, straight, quilled petals. It is excellent for the garden and blooms early and profusely. **35 cts. each, $3.50 per doz.**

Marguerite Bouchon. Unquestionably the finest pink Cactus Dahlia to date, and a general favorite. It is the sweetest rose-pink imaginable, blending to white at the center. A very good Dahlia for all purposes. **75 cts. each, $7.50 per doz.**

Mrs. Charles H. Breck. A Hybrid Cactus Dahlia of exceptional merit. In color, primrose-yellow blending to several shades of rose-pink. **50 cts. each, $5 per doz.**

Marjorie Castleton. Pleasing shade of rose-pink, tips and center creamy white. Petals incurved. **35 cts. each, $3.50 per doz.**

Cactus Dahlias

Perle de Lyon. The fringed or notched petals of this beautiful pure white Hybrid Cactus add greatly to its appearance and make it a most desirable sort to grow. **35 cts. each, $3.50 per doz.**

Pierrot. A unique variety, combining, as it does, the qualities looked for in an exhibition Dahlia as well as a splendid garden variety. The flowers are exquisite in form, composed of very long, tubular, narrow petals, which are of a deep amber color, sometimes showing white tips, but even when it comes a self-color without these tips it possesses an individual refinement different from all other sorts. **$1 each, $10 per doz.**

Ruth Gleadell. A fine Hybrid Cactus of sunburst shades—soft yellow shading to pink on the outer petals. Good stem; large size; excellent formation; profuse bloomer. **50 cts. each, $5 per doz.**

Wodan. One of the best Hybrid Cactus Dahlias for cut-flower and garden purposes. Large flowers of salmon-rose color, shading to old-gold in center. Strong stems and an abundant bloomer. **50 cts. each, $5 per doz.**

Yellow King. Pure yellow, shading to almost white at the tips of the florets: flowers almost as large as, and very much resembling, a chrysanthemum. **50 cts. each, $5 per doz.**

Pompon Dahlias

POMPON DAHLIAS

We offer below a select list of these beautiful Pompon Dahlias, a miniature form of the Show Dahlias, having the same ball-like form, but much smaller in size. The plants are also smaller, of branching habit, and produce an endless profusion of flowers, which are invaluable for table decoration and boutonnieres.

AMBER QUEEN. Rich amber, shaded apricot.

BOBBY. Plum-color.

DARKEST OF ALL. Very dark, nearest to black.

FASHION. Brilliant orange.

SNOWDRIFT. Snow-white.

SUNBEAM. Crimson-scarlet.

Price, any of the above, 25 cts. each, $2.50 per doz.

COLLECTION. 1 each of 6 varieties, $1.

SELECT PEONY-FLOWERED DAHLIAS

This splendid type of Dahlias, which originated in Holland, is now quite popular. The artistic flowers are very large and are perhaps best compared in form to the semi-double peonies. They all flower very freely and are borne on long, strong stems, making excellent material for cutting as well as for garden decoration. We offer a select list of standard varieties.

Avalanche. Pure white. Considered the finest white peony-flowered Dahlia. A very free-flowering variety, with splendidly formed flowers held erect above the foliage. **50 cts. each, $5 per doz.**

Bertha Von Suttner. A gigantic Peony-flowered Dahlia imported from Holland, and by far the finest of its color to date—a very beautiful shade of salmon-pink, delicately overlaid yellow. It has elegant twisted petals, of original formation, and is a favorite with every flower-lover. **75 cts. each, $7.50 per doz.**

Geisha. This variety is the pride of this type, one that stands out above all the others in its attractiveness. A very showy combination of brilliant scarlet and gold, with a ring of rich golden yellow at the center. Occasionally the first flower comes fully double, but those that follow usually show that beautiful golden yellow center so characteristic of the Peony-flowered type. One of the most sensational varieties, and one we highly recommend. **$1 each, $10 per doz.**

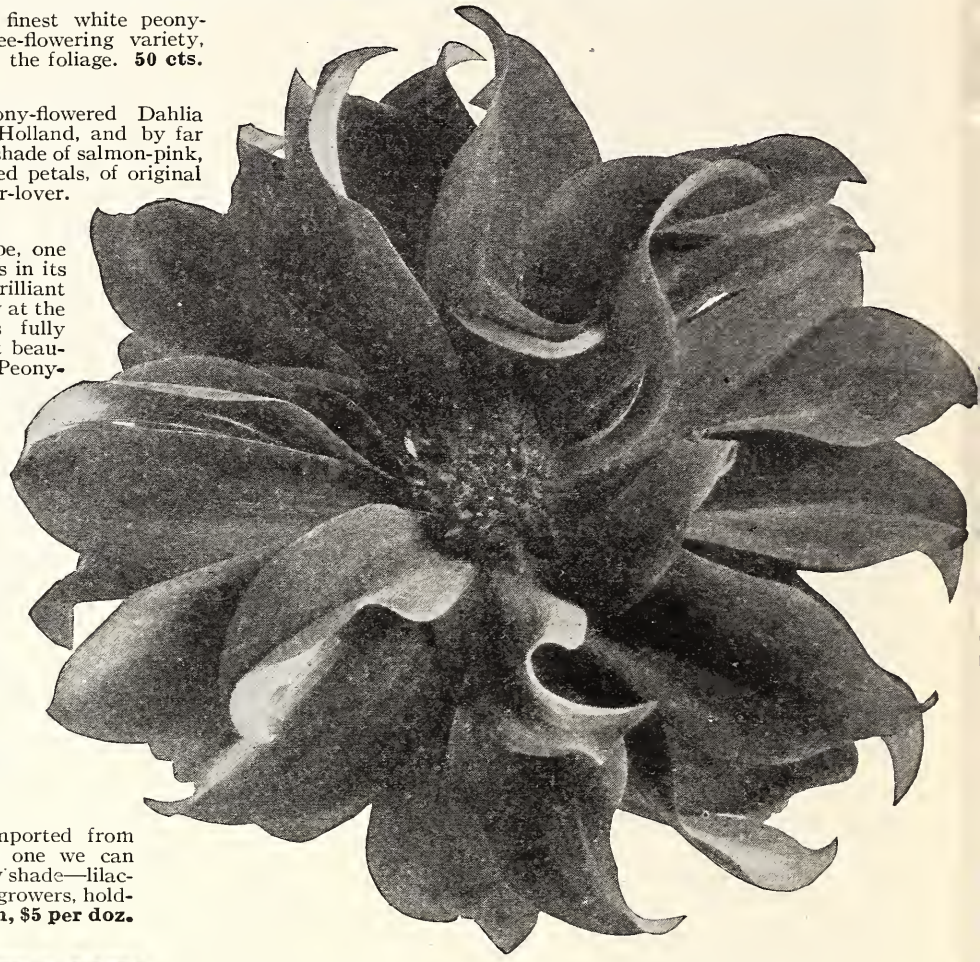
Golden Rose. An attractive shade of yellow suffused rose, each petal having a distinct picotee edge of rose. Good long stems; fine bloomer. **50 cts. each, $5 per doz.**

Hampton Court. Extra-large flower of bright deep pink, with yellow center. **50 cts. each, $5 per doz.**

King Albert. A giant dark violet-purple, one of the best purples. Tall plants and long strong stems. **75 cts. each, $7.50 per doz.**

Lady Alla. Large flowers of bright scarlet, on long, strong stems, well above the foliage. A good keeper. **50 cts. each, $5 per doz.**

Diernant Van Bystein. A variety imported from Holland, and one we can highly recommend. It is a very distinct and new shade—lilac-blue throughout. The plants are tall and sturdy growers, holding the blooms well above the foliage. **50 cts. each, $5 per doz.**



Single Dahlia, Rose-Pink Century

NEW CENTURY SINGLE DAHLIAS

We offer below a list of the best varieties of these Dahlias. They are very popular for garden decoration or for cutting.

Eckford Century. Pure white, beautifully spotted and penciled with crimson.

Poinsettia. The color of this variety reminds one of the brilliant scarlet poinsettia, so extensively grown as a Christmas flower.

Rose-Pink Century. Flowers 6 inches and over in diameter, of a clear rose-pink color. A strong grower, with long, stiff stems; fine for cutting.

St. George. An even shade of primrose-yellow.

Snowflake. A very free-flowering, pure snow-white variety.

Wildfire. Brilliant cochineal-red with orange-scarlet suffusion. Habit, dwarf and free.

Price any of the above, 25 cts. each, $2.50 per doz.

COLLECTION, 1 each of 6 Century Dahlias, $1.

FOUR FINE EXHIBITION DAHLIAS STRONG TUBERS

We offer what we believe to be four of the finest Exhibition Dahlias of recent introduction. These four varieties, under good cultivation, produce blooms about twice the size of the illustrations above.

1 Mrs. Carl Salbach . . . . each $1.50, dozen $15
2 Earle Williams . . . . . each $2.50, dozen $25
3 Emperor. . . . . each $4.00, dozen $40
4 Insulinda . . . . . each $1.50, dozen $15

SPECIAL COLLECTION OFFER

One Tuber each of the above Four Fine Exhibition Dahlias (4 Tubers), $8
Two Tubers each of the above Four Fine Exhibition Dahlias (8 Tubers), $15

Special Offering Collection

Six Fragrant Everblooming Rose Bushes for $5

American-Grown 2-Year-Old Dormant Plants

The Rose Bushes we are offering are 2-year-old, budded plants. They give better results than Roses grown on their own roots. They make stronger plants and produce more and finer flowers the first year.

1 Los Angeles
2 Kaiserin Augusta Victoria
3 Ophelia
4 Radiance
5 Gruss an Teplitz
6 Duchess of Wellington

COLLECTION OFFER

One plant each of the above 6 varieties, $5

Two plants each of the above 6 varieties, $9

SIX SPLENDID EVERBLOOMING ROSES

WE are again making a special offer of the above six fine Roses. The varieties offered are distinct in their colors and are noted for their free flowering qualities. Owing to our having had a large quantity especially grown, we are able to offer them at a slightly reduced price in collections only. If our patrons desire to purchase any of these varieties separately, we suggest their referring to the following two pages, where they will be found listed and more fully described.

HYBRID TEA ROSES

Our Roses are all American-grown, two-year-old stock. They are budded or grafted, and while some planters prefer stock grown on their own roots on account of the liability of budded plants to throw up suckers, this will rarely occur if deep plantings are made, and if a wild shoot should appear, it is readily distinguished by the most casual observer, and should be removed close to the root. Budded plants are more vigorous, produce finer blooms, come to bearing sooner, and are equally as permanent and hardy as those on their own roots, and many of the choicest varieties do not succeed unless budded or grafted.

Culture and Hints on Growing. The best soil in which to grow Roses is good top soil to which rotted cow-manure has been added. Dig out the bed to a depth of 2 feet or more, and, if drainage is imperfect, it must be provided for. Fill in with a mixture of soil and manure as above. It is best to make beds, if possible, in advance of planting, so as to allow time for settling. Beds may be made any size, but it is best to have them about 3½ by 5 feet, which enables you to pick the blooms without stepping on the beds. The ideal time to plant is just after severe frost has passed. Hybrid Teas should be set 1½ feet apart; Hybrid Perpetuals 2 feet apart, and both 8 inches from the edge of the beds. They should be planted with the roots well spread out and placed about 9 inches below the surface of the ground, the soil made firm about them, and liberally watered. Throughout the summer the surface soil should be cultivated weekly. If good cultivation, like the above, is given, watering will rarely be necessary.

Winter Protection. In this latitude the most satisfactory form of protection is to draw up a mound of soil from 8 to 10 inches high around the base of the plant, then cover the entire bed after the ground begins to freeze with any loose material, such as strawy manure evergreen boughs, or corn-stalks. The most serious insect pest that attacks Roses is the rose bug. We recommend the use of Melrosine listed on page 173 of our catalogue, as the best-known remedy for this pest.

This splendid effect was obtained by planting one variety of Hybrid Tea Rose. Mme. Caroline Testout in full bloom in June

BETTY. When established it produces blooms of marvelous beauty, particularly in the autumn. Large flowers of a glowing coppery rose color, suffused with gold.

COLUMBIA. This beautiful Rose has not only become one of the most popular greenhouse blooming varieties, but has proved itself one of the best bedding and garden sorts. It is of strong, vigorous habit and exceptionally free-blooming. In color it is a most pleasing shade of rose-pink.

DEAN HOLE. Silvery carmine with salmon shadings; large, full, of fine form and very fragrant. An excellent variety.

DUCHESS OF WELLINGTON. As the flower develops it changes in color from a saffron-yellow to a deep coppery saffron-yellow. The flowers are fairly full, with petals of great substance. A very free-flowering and fragrant variety.

ETOILE DE FRANCE. A vivid crimson with darker shadings; very double, of good size, and fragrant. One of the finest red varieties, succeeding equally well in all parts of the country.

GRUSS AN TEPLITZ. Of a rich scarlet, shading to a velvety crimson. A very free grower and in bloom all the time; succeeds well under the most ordinary conditions.

HADLEY. Considered by many as being one of the best garden varieties of its color—a rich crimson, varying to deep velvety crimson. The flowers are well formed and very fragrant. It is a very free and continuous bloomer.

JONKHEER J. L. MOCK. Deep pink, with outer petals rose-white. Large flowers borne on long, stiff stems.

JULIET. The color of this lovely variety is old-gold on the outside of the petals, interior a rich rosy red.

KILLARNEY BRILLIANT. Sparkling cerise-pink in color, shading lighter at the base of petals. A strong, vigorous grower and free bloomer. A wonderful improvement over Killarney.

KAISERIN AUGUSTA VICTORIA. A soft pearly white, faintly tinted lemon in the center. Very fragrant, beautifully formed flowers on long, graceful stems.

LADY ALICE STANLEY. A very much admired variety on account of its delightful fragrance and free-blooming qualities. A beautiful shade of coral-rose, the inside of the petals shading to flesh-pink, with deeper flushes.

LADY HILLINGDON. Elegant buds of good quality and size, opening into handsome flowers of clear apricot-yellow. Plant relatively hardy, of much vigor, and with an autumn-blooming habit.

LOS ANGELES. The following is the originator's description, all of which we fully endorse: "Los Angeles is, by all odds, one of the finest Roses ever introduced. The growth is very vigorous, and produces a continuous succession of long-stemmed flowers of luminous, flame-pink, toned with coral and shaded with translucent gold at the base of the petals. In richness of fragrance it equals in intensity the finest Maréchal Niel. The buds are long and pointed, and expand into a large flower; the color is maintained from the bud until the last petal drops."

Price, any of the above varieties, $1 each, $10 per doz., $75 per 100

HYBRID TEA ROSES

MISS LOLITA ARMOUR. A beautiful new variety. The flowers are of large size, and as they expand they develop to a deep, coral-red with a golden, coppery red suffusion, the base of the petals a rich golden yellow with coppery red sheen. **$1.50 each, $15 per doz.**

MME. BUTTERFLY. A sport of Ophelia, it shows even better growth than this sterling variety, with more and larger flowers of a brilliant pink, suffused apricot and gold. The flowers are of splendid form, good texture, and fragrance.

MME. CAROLINE TESTOUT. Large, globular flowers of bright satiny rose, with deeper center. Very free and fragrant, and one of the most popular and valuable bedding varieties.

MME. EDOUARD HERRIOT. The buds are coral-red in color, shaded with yellow at the base; the medium-sized open flowers, medium double, are coral-red, shaded yellow and bright rosy scarlet, passing to shrimp-red.

MRS. A. R. WADDELL. A lovely colored variety that everyone likes—a delicate, soft, rosy salmon, with a golden sheen. Flowers of medium size, especially handsome in half-expanded form. A free-flowering garden variety that should be in every collection.

MRS. AARON WARD. Splendidly formed full double flowers, equally attractive when full blown as in the bud state, of distinct Indian yellow, shading lighter toward the edges. Under certain weather conditions the entire flower will sometimes come a yellow-tinted white, but it is a beautiful variety under all color variations.

Radiance Roses

MRS. S. K. RINDGE. A beautiful and distinct Rose that has given general satisfaction. It is of strong, free-branching habit of growth, with dark green, mildew-proof foliage, and long-pointed buds carried erect on stiff stems. Color clear, rich chrome-yellow, which, as flowers mature, becomes suffused with salmon-pink. The flowers are of good size, moderately double, and produced freely and continuously. **$1.50 each, $15 per doz.**

OPHELIA. Flowers of perfect form, large size, and a most pleasing delicate tint of salmon-flesh, shaded rose, are borne erect on long, stiff stems. A variety that is exhibited in all Rose collections and flower shows on account of its sterling merit.

PREMIER. A new variety which was introduced as a forcing Rose, but it does well also as a bedding variety. Pure rose-pink in color, of good size and form.

RADIANCE. A brilliant carmine-pink, with salmon pink and yellow shadings at the base of the petals. A Rose that will withstand the most unfavorable hot summer weather.

RED RADIANCE. A counterpart of Radiance, except in color, which is a clear cerise-red. A most valuable addition to our list of Roses.

SOUVENIR DE CLAUDIUS PERNET. The new yellow Rose that promises to become what has long been wanted, a hardy everblooming real yellow. **$2 each, $20 per doz.**

WHITE KILLARNEY. Identical in every respect with the popular Killarney Rose, except in color, which is a pure white.

WILLOWMERE. The color of this lovely variety is perhaps best described as a coral-red in the bud state, opening to a large, full handsome flower of a rich shrimp-pink, shaded yellow in the center and flushed carmine-pink toward the edges of the petals.

White Killarney Rose

Prices, any of the above varieties, except where noted, $1 each, $10 per doz., $75 per 100

HARDY HYBRID PERPETUAL ROSES

Before the wonderful development of the Hybrid Tea Roses, the Hardy Hybrid Perpetual Rose was the most popular type for garden planting, and even now most of the varieties offered are grown by Rose-lovers in conjunction with the other sorts. The collection offered below will be found excellent.

In pruning Hybrid Perpetuals it is advisable to cut away all weak growth, and if quality of bloom is desired, cut back the strong canes to within 8 or 9 inches of the ground, but if quantity of bloom for garden effect is desired, leave these canes from 2 to 3 feet high, according to their strength.

FRAU KARL DRUSCHKI. Pure white in color, perfect in form, strong grower and remarkably free-flowering.

GENERAL JACQUEMINOT. One of the old favorites and probably the best known Rose in cultivation. Brilliant scarlet-crimson.

GEORGE ARENDS. (The Pink Frau Karl Druschki.) A free bloomer, of a beautiful pink variety, different in color from any other Rose.

MAGNA CHARTA. Strong, vigorous grower; bright pink suffused with carmine.

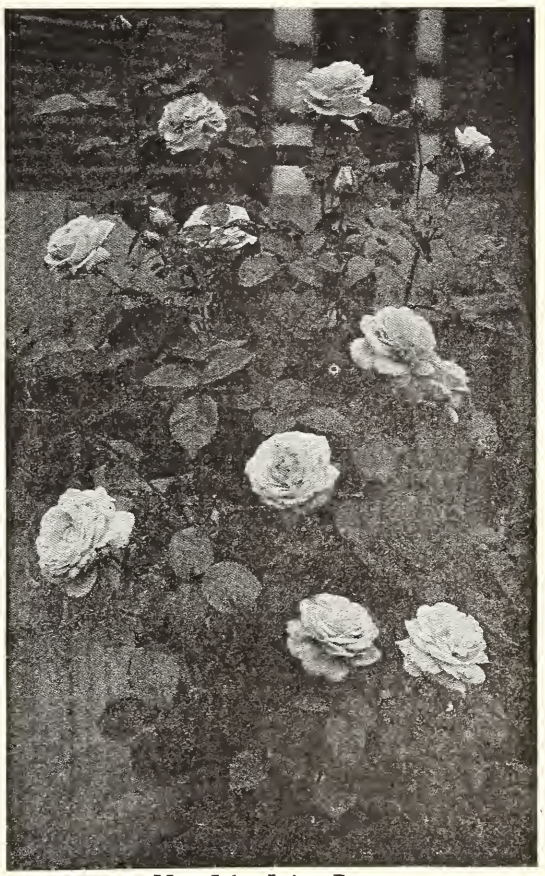
MRS. JOHN LAING. Very free-flowering; soft pink of beautiful form.

PAUL NEYRON. Perhaps the largest of all; dark rose in color.

SOLEIL D'OR (Golden Sun). A distinct type. A cross between Persian Yellow and a Hybrid Perpetual. Color varies from orange-yellow to reddish gold, shaded with nasturtium-red. Conical-shaped buds opening to large, full, flat-shaped flowers. Perfectly hardy and free-blooming.

ULRICH BRUNNER. A good strong grower with large, full flowers, of a bright cherry-red.

Any of the above, field-grown plants, $1 each, $10 per doz., $75 per 100

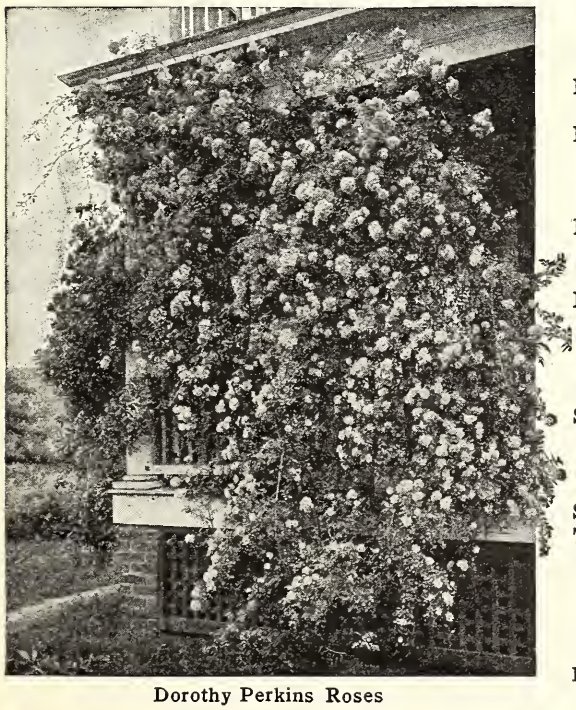


Mrs. John Laing Roses

CLIMBING AND RAMBLER ROSES

We offer on this page a selection of the best modern hardy Climbing and Rambler Roses. Climbing Roses require no pruning in the spring, except the cutting out of very old or dead wood, and the shortening of the laterals and long canes to make the growth conform to the space to be covered; but a severe pruning in July, directly after they have finished flowering, is beneficial. Cutting away at that time all old flowering wood will encourage a vigorous growth, which will give an abundance of flowers the following season.

AMERICAN PILLAR. A single-flowering variety of great beauty. The flowers are of large size—3 to 4 inches across—of a lovely shade of pink, with a clear white eye and cluster of yellow stamens, and are borne in immense bunches.



Dorothy Perkins Roses

CLIMBING AMERICAN BEAUTY. One of the best Climbing Roses. It is a strong, healthy, vigorous grower, frequently making shoots from 10 to 12 feet long, with good-sized flowers for a Climbing Rose that blooms so freely. A pleasing rose-pink of splendid form and good substance.

DOROTHY PERKINS. Soft shell-pink, flowering profusely in large clusters; very fragrant and lasting; a splendid Rose in every way.

DR. W. VAN FLEET. A Rose which, on account of its dainty color and exquisitely shaped buds and flowers, has become a great favorite. The long, pointed buds are of a rich flesh-pink on stems 12 to 18 inches long. One of the very best of the climbing Roses. Splendid for cutting.

EXCELSA. A distinct variety in form, color, and habit. It is vigorous in growth, with dark glossy green foliage and the double flowers are produced in large trusses. They are intense crimson-maroon in color.

PAUL'S SCARLET CLIMBER. Rosarians generally concede that this is the finest Climbing or Pillar Rose introduced to date. No Rose can compare with it for brilliancy of color—a vivid scarlet which does not bleach or fade throughout the life of the flower. **Strong, field-grown plants, $1 each, $10 per doz.**

SILVER MOON. Different from all other Roses, with beautiful, semi-double flowers 4½ inches and over in diameter. Pure white in color, with petals of great substance, beautifully cupped, forming a clematis-like flower. The large bunch of yellow stamens in the center adds to its attractiveness.

SOURCE D'Or. Considered as being the best yellow, with large, double flowers.

TAUSENDSCHON. Entirely distinct, not only in Ramblers but in Climbing Roses generally. The individual flowers are of a most elegant and graceful form, not stiff or unnatural, but as beautiful as a semi-double azalea. It is a most delicate shade of soft pink, when first opening changing to carmine on the reverse of petals when fully expanded. These are produced in trusses, each truss a veritable bouquet.

Price, any of the above varieties, except Paul's Scarlet Climber, extra-strong, field-grown plants, 75 cts. each, $8 per doz., $60 per 100

Planting of Japanese Iris

GERMAN IRIS (*Iris germanica*)

The true "Fleur-de-lis," the national flower of France, and one of the most desirable early spring-flowering plants. They are perfectly hardy, grow and bloom luxuriantly in late May and early June.

Five Newer Varieties

The following five varieties are of the latest introduction and are not only new in color but of better form.

HER MAJESTY. Standards lovely rose-pink; falls bright crimson, tinged with darker shade. The blending tints and coloring are rare for an Iris.

LOHENGRIN. Foliage and flowers of gigantic size, with petals 2 inches wide. Standards and falls of a uniform shade of violet-mauve.

NIBELUNGEN. Standards fawn-yellow; falls deep violet-purple, with fawn margin; distinct and very pretty.

PAULINE. An unusually large flower; the standards and falls are a rich pale pansy-violet. This variety has a decided perfume. A recent introduction which should find a p'ace in every garden.

RHEIN NIXE. Standards pure white; falls deep violet-blue, with white margin. A very tall grower and of splendid form. A very charming and rather scarce variety.

The above collection, 1 each of 5 varieties, $2. Price, any of the above varieties, 50 cts. each, $5 per doz.

Select Standard Varieties

Admiral Togo. Standards white, faintly tinged lavender; falls and standards lightly bordered purple. Extra-fine color.
Brooklyn. Standards lavender, yellow at the base; falls pale blue, base veined brown on a white ground, edged yellow, splashed with dark blue.
Flavescens. Standards and falls delicate shade of soft yellow.
Hokanum. Standards yellow, blotched with brown; falls rich purple, flecked with white, base tinted yellow.
Mme. Chereau. Standards pure white, edged azure-blue; falls deep white with blue penciling.
Pallida Dalmatica. A queen among flowers, grand and stately. Standards lavender; falls clear, deep lavender. Flowers large and extra fine.
Queen of May. Soft rosy lilac, almost pink.
Queen Victoria. Standards yellow sometimes tinted brown; falls crimson, striped yellow, yellow edge.
Velveteen. Standards yellowish buff; falls intense plum-purple.
Victory. Standards brown; falls deep violet, striped and bordered yellow at the base.

Price, any of the above, and all varieties mixed, 20 cts. each, $2 per doz., $15 per 100

JAPANESE IRIS (*Iris Kaempferi*)

The Japanese Irises usually flower after the German. They are much admired on account of their variety of color and large size. We offer twelve of the finest distinct varieties that we know of. They have been selected by us from a large collection of best named sorts. Six-petal varieties are termed double; three-petal varieties, single.

Amethyst. (Single.) Immense, wide-spreading flowers of fine substance. Color, light lavender or amethyst. 35 cts. each, $3.50 per doz.

Azure. (Double.) Immense flower; exquisite, wavy; mauve-blue with darker halo surrounding the yellow blotch at the base of the petals. 60 cts. each, $6 per doz.

Gold Bound. (Double.) Tall and showy with flowers of enormous size, probably the most beautiful of all. Pure white with large gold-banded center. A variety that is generally grown on account of its size and free-blooming qualities. 50 cts. each, $5 per doz.

Kamata. New, single-flowering, sky-blue variety veined white. Very distinct. 50 cts. each, $5 per doz.

Mount Hood. (Double.) Light blue, shaded darker, bright orange center. 35 cts. each, $3.50 per doz.

Pink Progress. Beautiful single-flowering Iris of ash-gray-lavender, clear blue halo, overlaid with silver sheen. 50 cts. each, $5 per doz.

Pyramid. Double violet-purple flowers, veined white in center of each petal. 35 cts. each, $3.50 per doz.

Shadow. This is a single-flowering variety, practically a self-color, best described as a reddish purple. 75 cts. each, $7.50 per doz.

HERBACEOUS PEONIES

Peonies rank among the most beautiful of all hardy perennials, and no garden is complete without their charming influence. The popular interest in many parts of the world has brought a very gratifying improvement in the Peony. In the newer sorts gigantic flowers have been produced, reaching, in many instances, the large size of 7 to 9 inches in diameter and 5 to 6 inches in depth, with strong, stiff stems 2½ to 3 feet long. The permanency of Peonies should especially recommend them to your favor; for, once planted in suitable soil, they will continue to grow better and larger each year. A situation well open to the sun suits them best but they thrive in partial shade also.

Culture.—The culture of Peonies is quite simple. They require a good, deep, rich soil and an abundant supply of water during the growing season. When enriching the ground, the use of too much fresh manure near the roots should be avoided. The main point to observe is, while the ground should be well spaded and cultivated, **not to plant the roots too deep.** The roots should be planted so that the eyes are barely covered (about 1 to 2 inches). Too deep planting is the cause of shy flowering.

Size of Roots.—The roots we offer have been grown two years from root divisions. If planted during April or May these roots should become well established and give some flowers the following year.

COMTE DE DIESBACH. Medium size; rich dark red, splendid grower; free bloomer; early. **50 cts. each, $5 per doz.**

COURONNE D'OR. (Calot 1872.) Large, flat, semi-rose type; pure white, with a ring of yellow stamens around a tuft of center petals, tipped with carmine. Medium tall; splendid grower; free bloomer. Late. One of the best white varieties. **75 cts. each, $7.50 per doz.**

DUCHESSE DE NEMOURS. (Calot 1856.) Medium size; pure white crown, sulphur-white collar, no crimson flecks; fragrant. Vigorous grower; medium height; very free bloomer. Early. Extra good commercial variety. Two days later than Festiva Maxima. **75 cts. each, $7.50 per doz.**

DUKE OF WELLINGTON. (Calot 1859.) Large; bomb type, with white guards and sulphur center. Medium tall; vigorous grower; free bloomer. Late. **75 cts. each, $7.50 per doz.**

EDULIS SUPERBA. (Lemoine 1824.) Large; loose, flat crown; bright mauve-pink collar mixed with narrow lilac. Early. Strong, upright; free bloomer. One of the best commercial pinks for Decoration Day. **50 cts. each, $5 per doz.**

FELIX CROUSSE. (Crousse 1881.) Large; globular; typical bomb; brilliant red. Strong, vigorous grower; medium height; free bloomer. One of the best reds. **75 cts. each, $7.50 per doz.**

FESTIVA MAXIMA. (Miellez 1851.) Very large; globular, rose type; pure white center, prominently flecked crimson, outer petals sometimes faint lilac-white on first opening. Very tall, strong, vigorous grower. Early. The most popular white variety for cut-flowers. **60 cts. each, $6 per doz.**

FLORAL TREASURE. Large, globular shape; medium tall grower; rich, soft pink. **50 cts. each, $5 per doz.**

FRANCOIS ORTEGOT. (Parmentier 1850.) Dark amaranth-red. Loose; medium height. Midseason. **50 cts. each, $5 per doz.**

LA SUBLIME. (Parmentier 1850.) Bright rich crimson; fragrant. Tall; very fine. **50 cts. each, $5 per doz.**

LA TULIPE. (Calot 1872.) Very large; flat, semi-rose type; lilac-white, outer guard petals striped crimson; fragrant. Tall, strong grower; free bloomer. Late midseason. A good Peony on account of growth and general habit. **75 cts. each, $7.50 per doz.**

LADY BRAMWELL. Midseason; medium grower; silvery pink. **50 cts. each, $5 per doz.**

LOUIS VAN HOUTTE. (Calot 1867.) Medium size; semi-rose type; deep carmine-rose, tipped silver, with fiery reflex—very brilliant coloring; fragrant. Medium height and habit. Late. **50 cts. each, $5 per doz.**

MME. CROUSSE. (Calot 1866.) Medium size; globular crown; pure white, center flecked crimson. Strong; medium height; free bloomer. Midseason. **75 cts. each, $7.50 per doz.**

MONS. JULES ELIE. (Crousse 1888.) Very large; medium compact high crown; pale lilac-rose, collar lighter shaded amber-yellow at the base. Medium height; strong growth. Early. Extra. **$1 each, $10 per doz.**

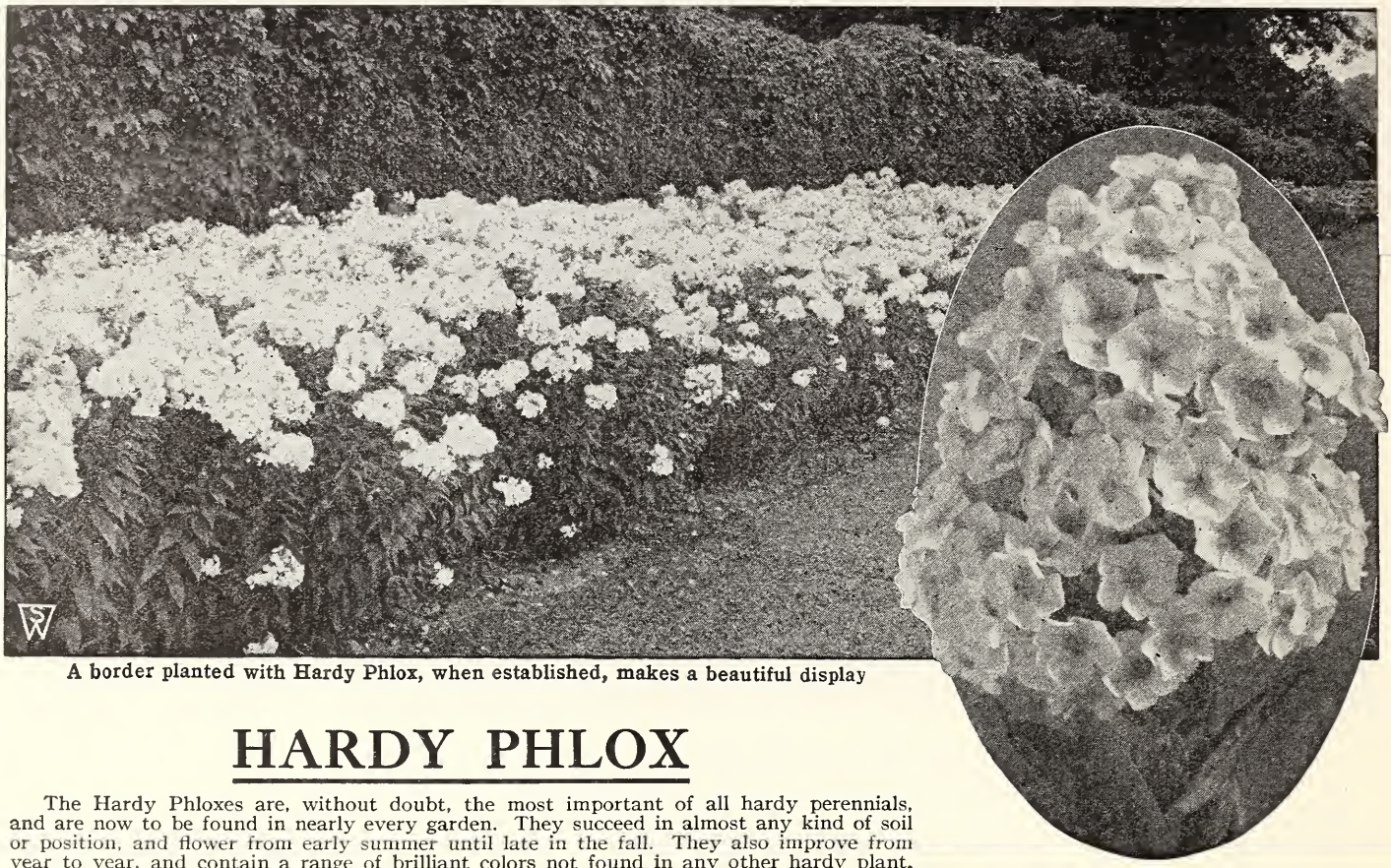
PRINCE IMPERIAL. (Calot 1859.) Very large, loose, semi-rose type; amaranth-red; tall, very strong grower; medium bloomer. Late midseason. **50 cts. each, $5 per doz.**

QUEEN VICTORIA. Whitleyi. Large full, compact bloom, with collar of flesh-white, fading to white, center petals flaked with red. Very strong grower; medium height; very free bloomer. The standard market variety for storage. **50 cts. each, $5 per doz.**

RICHARDSON'S DORCHESTER. (1870.) Large, compact, rose type; pale hydrangea-pink. Fragrant. Medium dwarf; upright; free bloomer. **$1 each, $10 per doz.**

RICHARDSON'S GRANDIFLORA. (1883.) Very large, flat rose type. Uniform rose-white. Tall, erect, strong grower. Very late. Perhaps the most valuable late variety of its color. **$1 each, $10 per doz.**

ROSA SUPERBA. Brilliant deep cerise-pink blooms; compact and perfectly formed. Healthy growth. Long stems. Midseason. **60 cts. each, $6 per doz.**



A border planted with Hardy Phlox, when established, makes a beautiful display

HARDY PHLOX

The Hardy Phloxes are, without doubt, the most important of all hardy perennials, and are now to be found in nearly every garden. They succeed in almost any kind of soil or position, and flower from early summer until late in the fall. They also improve from year to year, and contain a range of brilliant colors not found in any other hardy plant. We have a very fine collection of them.

CULTURE.—Hardy Phlox may be planted in spring or fall; a mulch of old manure thrown around the roots will be of benefit to the plants. Phlox should be set out 18 inches apart, and if kept well watered will produce both individual blossoms and heads of bloom far larger than otherwise, and amply repay the extra trouble. To procure best effects, plants should be massed in from six to twelve clumps of each variety.

Twelve Superb Hardy Phlox

We offer below a choice selection of the Hardy Phlox. Our plants are choice divisions from field-grown plants which we have found to give excellent satisfaction.

Baron Van Dedem. A very striking new variety. Large trusses and flowers; color, glistening scarlet-blood-red.
Bridesmaid. Pure white with large crimson center.
Elizabeth Campbell. Soft pink; large flower. 40 cts. each, $4 per doz., $30 per 100.
Fantome. Deep lavender, edged and shaded white.
Fraulein G. Von Lassberg. Pure white; large panicles.
Hodur. Pink, shaded white; very lovely.
Lothair. Bright crimson.
Mrs. Charles Door. Beautiful shade of lavender.
Pantheon. Cerise-salmon, white center; large branching spikes.
Pecheur d'Island. Lavender-cerise.
Richard Wallace. White with large carmine eye.
R. P. Struthers. Bright rosy red, crimson eye. One of the very best.

Price of the above varieties, except Elizabeth Campbell, 30 cts each, $3 per doz., $20 per 100

Early-flowering Hardy Phlox *(Phlox suffruticosa)*

Miss Lingard. A grand variety, which begins flowering after the middle of June and continues throughout the season. Extensively used for cut-flowers. 30 cts. each, $3 per doz., $20 per 100.

TRITOMA PFITZERI

The greatest bedding plant ever introduced, surpassing the finest cannas for attractiveness and brilliancy, equal to gladioli as a cut-flower, and blooms incessantly from June until December, regardless of frost. Plants are perfectly hardy in the open ground all winter south of Philadelphia; further north they must be protected or wintered in a cellar like the ordinary Tritoma. Just bury the roots in sand; nothing more is required. Should be planted out early in spring, and will commence growth and bloom at once, growing larger and finer every day. **$3 per doz., $20 per 100.**

Tritoma Pfitzeri

HARDY CLIMBING PLANTS

Ampelopsis (Sometimes called Boston Ivy and Japan Ivy)

Veitchii. This is the most deservedly popular of all climbing plants, being entirely hardy in the most exposed places and attaining a height of 30 feet in two or three years; clings to stones, brick or woodwork with the greatest tenacity. During the summer the leaves are a rich shade of green and lap over each other with great regularity, like a coat of mail or like slates on a roof. But it is in the fall that it shows its exquisite beauty. The leaves then change to the brightest tints of scarlet, crimson and orange, so dazzling as to be seen at a great distance. Extra strong field-grown plants, 75 cts. each, $8 per doz., $60 per 100; extra strong, 3-yr.-old plants, 75 cts. each, $7 per doz., $50 per 100.

Quinquefolia (Virginia Creeper; American Ivy). This well-known climber is one of the best and quickest growing varieties for covering trees, trellises, arbors, and the like. The large, deep green foliage assumes brilliant shades of yellow, crimson and scarlet in the fall. Strong field-grown plants, 75 cts. each, $8 per doz., $60 per 100.

Bignonia radicans (Scarlet Trumpet Vine)

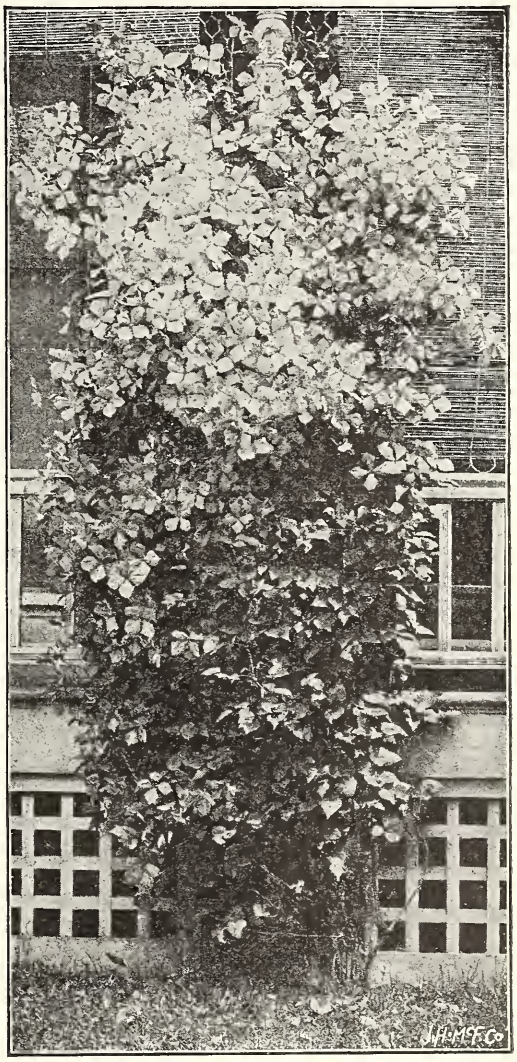
For covering unsightly places, stumps, rockwork or planting in crevices in ledges, the Bignonias will be found very useful. The flowers are large, attractive and showy, and borne profusely when the plant attains a fair size. 50 cts. each, $5 per doz.

CLEMATIS

The Clematis we offer this season are exceptionally fine, strong 2-year-old plants. We have reduced the number of varieties to such sorts as, from experience, we know to succeed best in our climate. Many failures in the growing of Clematis are the result of too shallow planting. The crown of the roots should be set at least 3 inches below the surface of the soil.

Small-Flowering Clematis

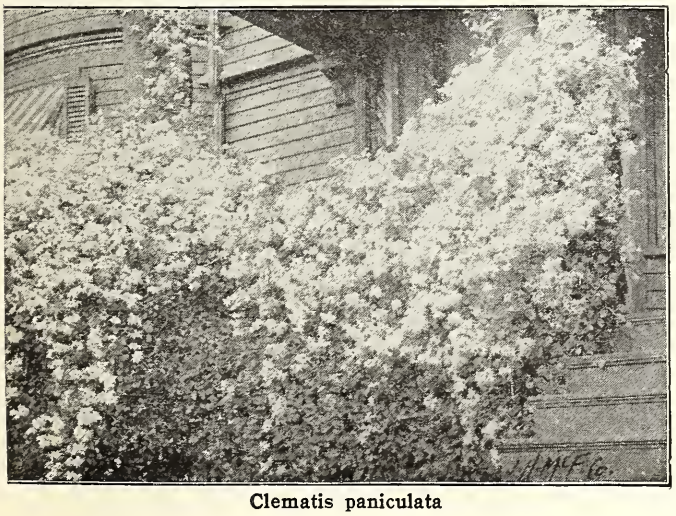
Paniculata (*Japanese Virgin's Bower*). This handsome hardy climber is one of the choicest and most satisfactory climbing flowering plants we know. The plant is of strong, rapid growth, with small, dense, cheerful green foliage, giving it a grace and elegance possessed by no other hardy climber. The flowers appear in the greatest profusion during August, and continue until late in the fall, are white in color and most deliciously fragrant. The plant succeeds in almost any position; not only is it well adapted to run up all kinds of supports, but is just as useful for planting among rockwork, sloping banks, covering graves, or, in fact, in any position where a graceful vine is desired. Strong, field-grown plants, 75 cts. each, $7 per doz., $50 per 100.



Clematis Jackmanii

Large-Flowering Clematis

Jackmanii. The best known and most valued variety of this popular family. A perfect mass of bloom when in full flower. Color, dark, rich, royal purple. Strong, field-grown plants, $1 each, $10 per doz., $75 per 100.



Clematis paniculata

Henryi. Pure white; large and remarkably handsome. Strong, field grown plants, $1 each, $10 per doz., $75 per 100.

Ville de Lyon. Bright red, well-formed flowers; a very fine variety. Strong, field-grown plants, $1 each, $10 per doz., $75 per 100.

EUONYMUS

Radicans. This trailing form of Euonymus is particularly desirable for its dense deep green evergreen foliage. It is extremely hardy and useful for covering low foundation walls or may be clipped the same as boxwood for an edging plant. Strong, field-grown plants, 75 cts. each, $7 per doz., $50 per 100.

HONEYSUCKLE

Halliana (Hall's Japan Honeysuckle). A strong, vigorous, almost evergreen sort; white flowers changing to yellow; very fragrant; flowering from July to December; holds its leaves nearly all winter. Extra-selected plants, 50 cts. each, $5 per doz., $40 per 100.

Scarlet Trumpet Honeysuckle. This and its varieties are the handsomest in cultivation. It is a strong, rapid grower and produces scarlet, inodorous flowers. 50 cts. each, $5 per doz., $40 per 100.

WISTARIA

Sinensis (Chinese Wistaria). A most beautiful climber of rapid growth. When well established it makes a growth of 15 to 20 feet in a season. Flowers pale blue. Extra-strong plants, 60 cts. each, $6.50 per doz., $50 per 100.

Hardy Ornamental Flowering Shrubs

Shrubs are of great importance for the ornamentation of home-grounds. They have many uses; some are valuable as cut-flowers, while others are as decorative as any ornamental foliage plant. They may be used as a dividing-line between the flower- and vegetable-garden, or between the lawn and the uncultivated land beyond, as a background for the flower border, and for hiding an unsightly building, fence or foundation. Soil where they are to be planted should be well spaded and enriched with bone-meal. Unless a very immediate effect is required, sufficient space should be allowed between them to permit of full development—3 feet for dwarf varieties and 5 feet for the taller ones. As a general rule, shrubs should be thinned or pruned just after they have finished flowering, and then only slightly, just enough to keep them in nice, symmetrical shape.

NOTICE. **The best time to plant is from early spring, when ground can be worked, until about May 15, the earlier the better. Owing to the short shipping season, we cannot accept orders for shrubs or hedge plants for any states except New York, New Jersey, Pennsylvania, and Connecticut.**

ALMOND, FLOWERING (Amygdalus)

This beautiful shrub is one of the loveliest. The flowers are borne on its slender branches during May, and are very fragrant.

Pink. Double-flowering; pink.
White. Double-flowering; white.

Strong plants, 2 to 3 feet, 75 cts. each, $7.50 per doz.

Deutzia gracilis

ALTHEA (Rose of Sharon)

The Altheas are among the most valuable of our tall, hardy shrubs on account of their late season of blooming, which is from August to October, a period when few shrubs are in flower. They are extensively used as hedge plants, for which they are admirably adapted. We offer in four distinct colors. **Red, Pink, White,** and **Purple.** Strong plants, 2 to 3 feet, 60 cts. each, $6 per doz.

CALYCANTHUS

Floridus (Sweet or Strawberry Shrub). A very pretty shrub flowering during May. The flowers are double, chocolate-colored, and strawberry scented. Strong plants, 2 to 3 feet, 60 cts. each, $6 per doz.

DEUTZIAS

Well-known, profuse-flowering shrubs blooming in early summer. They succeed well in any sunny position.

Gracilis. A great favorite, dwarf, covered with spikes of pure white flowers in early summer. Strong plants, 1½ to 2 feet, 60 cts. each, $6 per doz.

Pride of Rochester. A fine, tall-growing, double, white-flowering variety. Strong plants, 2 to 3 feet, 60 cts. each, $6 per doz.

DOGWOOD (Cornus)

This is a very well-known shrub. The flowers appear in May, before the foliage. In autumn it takes on a rich crimson shade.

Siberica (Siberian Dogwood). A strong-growing variety with white flowers. The branches are crimson colored in winter. Strong plants, 2 to 3 feet, 50 cts. each, $5 per doz.

FORSYTHIA

A very decorative shrub with bright golden yellow, star-shaped flowers which burst into bloom at the beginning of spring while the bush is otherwise bare.

Suspensa (Weeping Golden Bells). A tall shrub of willowy growth, the branches gracefully arching and covered with golden yellow bells in early spring.

Viridissima (Golden Bells). Similar to the above but of more erect habit.

Strong plants of either of the above, 2 to 3 feet, 60 cts. each, $6 per doz.

HONEYSUCKLES (Bush Honeysuckles)

We offer two varieties of the Bush Honeysuckles. They are splendid for lawn or border planting.

Tatarica (Tartarian Honeysuckle). Pink flowers, contrasting beautifully with the foliage. Blooms in June.

Tatarica alba. White form of the above.

Either of the above, strong plants, 2 to 3 feet, 50 cts. each, $5 per doz.

HYDRANGEA

We offer two varieties of this, perhaps the most popular of flowering shrubs.

Arborescens grandiflora (Snowball Hydrangea). This magnificent, perfectly hardy American shrub has snow-white blossoms of largest size. One of its most valuable characteristics is its coming into bloom just after the passing of all the early spring-blooming shrubs, flowering from early June to late July. Strong plants, 75 cts. each, $7.50 per doz.

Paniculata grandiflora. Considered the most popular summer-flowering shrub. The flowers, which are borne in dense, pyramidal panicles a foot long, in greatest profusion, are white when they first open but gradually change to rose color, and remain in good condition for weeks. Strong plants, 75 cts. each, $7.50 per doz.

Philadelphus coronarius

Hydrangea arborescens grandiflora

KERRIA (Corchorus)

One of the most graceful and beautiful of the lower-growing shrubs for the front of a shrubbery border, or in a mixed planting of low shrubs around porches.

Japonica. Attractive golden yellow flowers are borne continuously from June to October. Strong plants, 75 cts. each, $7.50 per doz.

PHILADELPHUS (Mock Orange)

This old-fashioned sweet-scented shrub has long been a close rival of the lilac in popularity.

Coronarius (Garland Mock Orange). This is a popular tall variety, refined and beautiful; large white flowers. Strong plants, 60 cts. each, $6 per doz.

PRUNUS

We offer two varieties of the Flowering Plum.

Pissardii (Purple-leaved Plum). A dwarf shrub covered with single white flowers in spring. When they first appear the leaves are a lustrous crimson, changing to rich purple.

Triloba (Double-flowering Plum). An interesting shrub, of medium height, bearing in early spring semi-double, delicate pink flowers over an inch in diameter.

Either of the above, strong plants, $1 each, $10 per doz.

SPIRÆA (Meadow Sweet)

Anthony Waterer. A valuable variety. Color bright crimson. It is of dwarf, dense growth, never exceeding 30 inches in height and blooms the entire summer and fall, if the old flower-heads are removed.

Van Houttei. The grandest of all the white Spireas. It is of compact habit and a beautiful ornament for the lawn at any season, but when in flower is a very beautiful sight, the white blooms almost entirely covering the foliage.

Either of the above, strong plants, 60 cts. each, $6 per doz.

Weigela rosea

We have listed, and carry during the early spring, the flowering shrubs offered on this and the two preceding pages. We will be pleased to make prices to any of our patrons desiring larger quantities or other varieties.

SYRINGA, or LILAC

We offer two of the common varieties of Lilac, but will be pleased to correspond with our customers who are desirous of growing the better named varieties.

Common Purple (*Syringa vulgaris*). Purple.
Common White (*S. vulgaris alba*). White.

Either of the above, strong plants, 50 cts. each, $5 per doz.

TAMARIX

Africana. Strong, slender, tall-growing shrub of irregular habit, with feathery foliage and small, delicate flowers, borne profusely on gracefully-bending branches. The pink flowers are very attractive during May. Strong plants, 2 to 3 feet, 60 cts. each. $6 per doz.

VIBURNUM

Plicatum (Japan Snowball). One of the choice hardy shrubs, with healthy dark green foliage. The perfect balls of pure white flowers are borne in great profusion in May. Strong plants, $1 each. $10 per doz.

Opulus (High-Bush Cranberry). The white flowers in June are followed in autumn by bright scarlet berries, which are very attractive until late in winter. Strong plants, 75 cts. each, $7.50 per doz.

WEIGELAS

These easily take rank among the most popular flowering shrubs, covered, as they are, in May and early June by their large, trumpet-shaped flowers.

Eva Rathke. Considered the finest Weigela in cultivation, blooming continuously throughout the summer and autumn. The flowers are a rich ruby-carmine.

Rosea. Soft rosy carmine.

Either of the above, strong plants, 60 cts. each, $6 per doz.

HEDGE PLANTS

We offer two of the principal shrubs that are extensively used for Hedge Plants

BERBERIS THUNBERGII (Japan Barberry)

Where a dwarf, deciduous hedge is wanted, nothing equals this beautiful Barberry. It requires but little pruning to keep it in shape. The leaves are small, light green, and towards fall assume rich, brilliant colors, the fruit or berries becoming scarlet. It is used extensively throughout the country and is perfectly hardy.

	Doz.	100
Extra-strong, 1 to 1½ ft., 4 to 6 branches..	$5 00	$35 00
Extra-strong, 1½ to 2 ft., 6 to 8 branches..	7 00	50 00

CALIFORNIA PRIVET

Ligustrum ovalifolium

This is, perhaps, the most popular of all the hedge plants. Being absolutely hardy, it increases in beauty with each successive year. To get best results, plants should be set 1 foot apart in double rows in zigzag fashion, so that the plants are diagonally opposite each other. This practically places them 6 inches apart, which is desirable to get quick, dense growth. May be planted from March 15 to May 15, or from October to frost. Extra-strong, 2 ft., 5 to 6 branches, $2 for 25, $7 per 100, $60 per 1,000.

BOXWOOD (Buxus)

We offer this excellent dwarf plant for edging. It is advisable to place orders early in the season. They require to be planted early in the spring in order to get the benefit of good spring growth before hot weather sets in. $2 per doz., $12 per 100, $100 per 1,000.

Hedge of California Privet

GRAPE-VINES

Orders for GRAPE-VINES for shipment outside of the states of New York, New Jersey, Pennsylvania, and Connecticut, we cannot accept

We receive many flattering testimonials as to the quality of our Grape-vines.

Selected vines, except where noted, 75 cts. each, $8.50 per doz.; extra-strong, $1.25 each, $12.50 per doz.

White Grapes

Diamond. White. Bunch large, compact, shouldered; berries large, round; skin thin, but tough; flesh tender, juicy, with but little pulp. Vine is a good grower, with thick, healthy foliage; hardy and productive; of fine quality. Ripens a little before Concord.

Green Mountain. White. Bunch medium to large, shouldered; berries medium, greenish white; skin thin, tough; pulp tender, sweet, with few seeds; of excellent quality, free from foxiness; very early. Vine vigorous, healthy, hardy and very productive. A fine Grape, identical in every way with Winchell.

Niagara. White. Bunch very large and handsome, often shouldered; compact; berries large, round; skin thin, tough, does not crack, and carries well; has not much pulp when fully ripe; melting, sweet, with a flavor and aroma peculiarly its own, and agreeable to most tastes; ripens with Concord.

Pocklington. Pale green, usually with tinge of golden yellow where exposed to the sun; bunch large, very compact; berries very large, covered with a beautiful white bloom; flesh juicy, sweet, with considerable pulp.

Martha. White, turning pale yellow when fully ripe; very sweet; bunch medium, compact. Vine healthy and hardy. Very productive.

Red Grapes

Agawam. Red or maroon. Bunch usually loose, shouldered; berries large; skin thick; flesh pulpy, meaty, juicy, of a rich, peculiar aromatic flavor; ripens about with Concord; a good keeper. Vine a strong, rank grower, hardy and productive; should be pruned, leaving long canes.

Brighton. Red. Bunch medium to large, long, compact, shouldered; berries medium; skin thin; flesh tender, sweet, with scarcely any pulp; quality best. Vine a vigorous grower, healthy, hardy and productive; one of the best early red Grapes. The flowers have reflexed stamens and do not always fertilize fully unless planted with Concord, Worden, Martha, or other varieties which blossom at the same time. Ripens with Delaware.

Catawba. Dark red when fully ripe. Bunch large, moderately compact, shouldered; berries medium to large; skin thick, tough; flesh somewhat pulpy, with rich, vinous flavor, of best quality for both table and wine. Vine a good grower, hardy, with healthy foliage; very productive and profitable where it succeeds and matures well. Ripens too late for high latitudes.

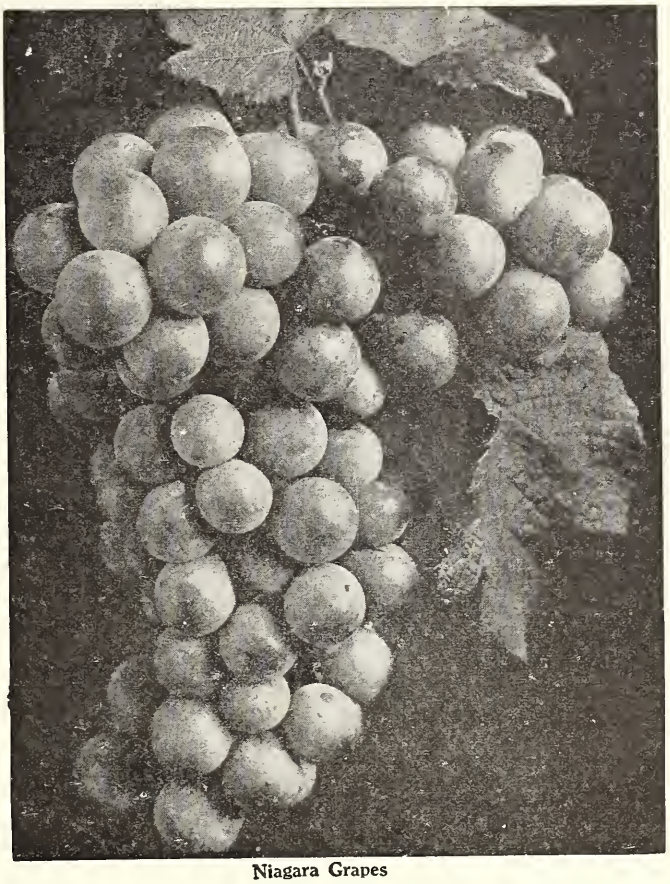
Delaware. Red. Bunch small, compact, sometimes shouldered; berries small; skin thin, but firm; flesh juicy, very sweet and refreshing, of best quality for both table and wine; ripens with Concord or a little before. Vine hardy, productive, a moderate grower; requires rich soil and good culture. Is regarded by many as the best American Grape, all things considered. It should be in every garden and vineyard.

Lucile. Red. Very large in bunch and berry; compact; skin thin but tough. Good shipper; exceedingly productive. Flesh pulpy, sweet, somewhat foxy.

HUBBARD The New Black Grape

Quality sweet and delicious, having that fine and pleasant flavor approaching the European or Vinifera Grapes; seeds few and small, which separate freely from the tender pulp; skin thin and firm; berries and bunch large and uniform. Ripens about 10 days earlier than Concord. We have investigated many new Grapes in the past 10 years and found no other with so many excellent points. The Hubbard Grape being of better quality, a better shipper, better size, healthy foliage, a strong grower and earlier ripening makes it a more desirable Grape to plant than either Concord or Niagara. Our supply of vines of this new Grape is limited and orders will be filled in rotation.

3-yr., first-class Vines, $1.50 each, $12 for 10, delivered by parcel post



Niagara Grapes

Black and Blue Grapes

Concord. Black. Early. Decidedly the most popular Grape in America, and deservedly so. Bunch large, shouldered compact; berries large, covered with a rich bloom; skin tender, but sufficiently firm to carry well to distant markets; flesh juicy, sweet, pulpy, tender. Vine a strong grower, very hardy, healthy and productive. For general cultivation the most reliable and profitable variety.

Eaton. Black. Similar in foliage to Concord. In growth, health, and hardiness of vine, in every respect its equal, while in size of bunch and berry it is much larger and more attractive. Leaf large, thick, leathery, covered on the under side with a thick brownish yellow down. Bunch very large, compact, double shouldered; berries very large, many 1 inch in diameter, round, black, covered with a heavy blue bloom, adheres firmly to the stem; skin thin, but tough; pulp tender, separating freely from the seeds and dissolving easily in the mouth; very juicy. Ripens with Concord or a little earlier.

Moore's Early. Black. Bunch rarely shouldered; not quite so large as Concord; berries larger and very much like it in flavor and quality. Vine a moderate grower; very healthy and hardy; foliage thick, leathery, somewhat resembling Concord, except on the under side, which is covered with a yellowish brown down. Produces a fair, and, with high cultivation, a heavy crop. Ripens so early as to be nearly out of market before Concord is ripe and is, therefore, a very popular early market variety. Succeeds best in rich soil.

Worden. Black. Bunch large, sometimes shouldered, compact; berries very large, skin thin. Superior to the Concord in the following points: It is better in quality, has a larger berry, a more compact and handsome cluster, and ripens five to ten days earlier.

CHOICE SMALL FRUITS

Orders for CURRANTS, GOOSEBERRIES AND RASPBERRIES for shipment outside of the states of New York, New Jersey, Pennsylvania, and Connecticut, we cannot accept.

We have endeavored to list only the choicest sorts and, while our list is a short one, only the finest sorts are offered. This is preferable to a long list which would necessarily contain varieties of less merit.

SHIPPING SEASON APRIL AND MAY

Wilder Currants

CURRANTS

Plant in rows 6 feet apart, and 4 feet apart in the rows, or, if to be cultivated both ways, 5 feet apart each way. The soil should be well cultivated to a depth of 12 inches. Plants should be well set and roots firmed in the soil. After planting cut back the tops one-half of the previous year's growth. For the first 4 or 5 years some of the wood made in the spring should be cut back in the fall, in order to make a more symmetrical plant and a greater number of fruit-buds. Rotted stable manure around base of plant forked in each fall will prove very beneficial.

Selected 3-year-old stock, 50 cts. each, $5 per doz., $40 per 100

Wilder (President Wilder). Bush upright, vigorous; clusters above medium length; berries averaging large; bright red; excellent, with a mild subacid flavor. Ripens early and remains bright and firm until very late. Because of its exceedingly vigorous growth, great productiveness, high quality, and remaining good so long after ripening, we recommend this as one of the best Red Currants, both for table and market.

Boskoop Giant. Bush strong grower; productive. Fruit rich, sweet flavor, ripens evenly and hangs well on bushes for a long time after ripening in good condition; firm, pulpy flesh, making it well adapted to canning and shipping. Largest and best black variety.

White Imperial. Bush vigorous and very productive; clusters large; berries very large, sweet and most delicious. This is the best of the White Currants, and fine for the table. Equally desirable as a market Currant.

Red Cross. Quality is good and the size of berries uniform. The red clusters are large, making it easy to pick. It makes abundant wood-growth and is not much bothered by borers.

Black Currants. We are unable to supply these on account of blister rust which injures pine trees. The Conservation Commission of the state and the Federal Government have prohibited the shipment of these bushes.

GOOSEBERRIES

Plant in the same manner as described for currants, and give the same annual manuring. The American varieties will need close pruning every year.

AMERICAN VARIETIES

Selected 3-year-old stock, 60 cts. each, $6 per doz., $45 per 100

Downing. Pale green, large, prolific and good. Best for home and market use.

Red Jacket. Bush vigorous, upright and productive. Fruit varies in size from medium to above medium. Color pale red.

Chautauqua. Golden yellow; large variety and of fine quality.

We offer for August delivery strong pot-plants of Strawberries. Write for our Midsummer catalog, issued in July.

BLACKBERRIES

Blackberries require the same treatment as raspberries and should be planted the same distance apart. We have avoided listed varieties of the prostrate habit, the tips of which constantly root in the ground.

Extra-strong canes, 20 cts. each, $2 per doz., $15 per 100

Blowers. Large; glossy; fine quality. Ripens early and continues long in season.

Eldorado. Large, coal-black, sweet, melting, without hard core. Vigorous, hardy and very productive. Fine market variety.

Iceberg. A snowy white Blackberry. Early, sweet, and tender.

Rathbun. Very large, jet-black; firm; best quality; very productive.

RASPBERRIES

Raspberries succeed well on any good land suitable for corn or wheat, but amply repay high cultivation. Ground bone is the best fertilizer. Red and yellow varieties should be planted in rows 6 feet apart and 3 feet apart in the rows; black- and purple-cap varieties 7 feet apart and 3 feet in the rows. Cut out all old wood as soon as the canes have done bearing—to give more vigor to the young canes. Blackcap varieties should be planted only in the spring.

Extra-strong canes, 20 cts. each, $2 per doz., $15 per 100

RED

Cuthbert. Deep rich crimson; large to very large; very firm. One of the very best market varieties. Season medium to late. A remarkably strong, hardy and productive variety.

Marlboro. Light crimson, large, very firm, and of good quality. A fine early market variety; vigorous and productive.

Early June. A new, early, red Raspberry, originated at the New York Experiment Station. Berries large and firm, attractive, bright red color; very productive. A valuable sort for the garden or market.

BLACK AND PURPLE

Columbian. Dull purple, very large, moderately firm. A good market berry and one of the best for canning. Bush remarkably strong and wonderfully productive.

Plum Farmer. A large, blackcap berry of rich, sweet quality. Hardy and very productive. One of the best market varieties and very popular.

YELLOW

Golden Queen. Large, golden yellow, of fine quality. Very hardy and productive; succeeds almost anywhere, and is a most desirable berry, bringing good prices in the market.

TWO FINE EVERBEARING RASPBERRIES

EXTRA-STRONG CANES

We consider the following two Raspberries of superior quality and quite the finest of recent introduction.

White Queen. This wonderful new Raspberry bears an abundance of almost white fruits from August until well into November. The extra-large, firm berries, which are free from seeds and acid, are of exquisite flavor and aroma. Plants attain a height of 6 feet and bear good crop the first year. **30 cts. each, $3 per doz., $20 per 100.**

St. Regis. A remarkable Raspberry and, all things considered, the most valuable variety that has appeared in the last quarter of a century. The berries, though not of large size, are bright red and of excellent quality. It ripens very early, in advance of all the other red varieties, and the canes, in addition to being exceedingly hardy and drought-resistant, are exceedingly prolific. It has rich green foliage that does not scald or rust, hence it succeeds on hot, sandy soil where other varieties fail. Besides yielding an enormous crop in June, it gives also a moderate one in the autumn, and, unlike other red Raspberries, it produces a crop of berries the first year, or the season it is planted. **20 cts. each, $2 per doz., $15 per 100.**

SELECTED FRUIT TREES

Orders for FRUIT TREES for shipment outside of the states of New York, New Jersey, Pennsylvania, and Connecticut, we cannot accept.

We recommend northern-grown fruit trees to our customers, as they will be found to give better satisfaction than southern-grown or western-grown trees. We furnish excellent clean trees, which, if planted carefully, are almost sure to succeed. Trees, when received, should be planted at once in rich, prepared soil, the roots being carefully separated and spread. If dry weather follows planting, the trees must be watered and mulched. Branches of last season's growth should be well cut back, thus encouraging the vigorous growth of new healthy shoots.

Apples

The following is a list of the best Apples we have decided to include after trial. The months indicated are those in which the different varieties usually mature.

SUMMER VARIETIES

Early Harvest. Medium size; pale yellow; mild, fine flavor. August.

Golden Sweet. Large, yellow, sweet variety. August, September.

Red Astrachan. One of the best of the summer varieties. Apples are of medium size but uniform; flesh white, streaked with red; juicy and tender. August.

Sweet Bough. Splendid for baking; large; pale yellow; tender and sweet. August.

Yellow Transparent. A splendid early variety; fruit good size; mild and delicious; yellowish white when ripe.

AUTUMN VARIETIES

Fall Pippin. Very large; yellow; tender, juicy and rich. A favorite fall cooking Apple. October to November.

McIntosh Red. A valuable hardy Canadian sort. Medium size; nearly covered with dark red; flesh white, fine, tender, juicy and refreshing. A good annual bearer of fair, handsome fruit. Resembles the Fameuse, but is larger and more hardy, and fully equal in quality to this standard sort. November to February.

Gravenstein. Vigorous growth; fruit large; greenish yellow, striped with red; good for home use or market. September, October.

Wealthy. A native of Minnesota, where it has proved perfectly hardy, vigorous and productive. Fruit of medium size; red, streaked with white. Oct. and Nov.

WINTER VARIETIES

Baldwin. A fine keeper in a common dry cellar. Very large, round; red-and-yellow skin. Very profitable market sort. December to March.

Delicious. Distinctive in shape and beautiful in color. Large; brilliant dark red, blending to golden yellow at the blossom end; sweet in flavor, slightly touched with acid, but only enough to make it more pleasing. Bears annually. Dec. to April.

King (Tompkins County). Large and handsome; striped red and yellow. Tree vigorous and productive. November to May.

Northern Spy. Large; bright yellow; juicy, crisp and tender. Splendid for table or cooking. Ready to eat in November and will keep in good condition until June.

Rhode Island Greening. A splendid cooking variety. Fruit large; green, sometimes with red cheek. October to February.

Roxbury Russet. Medium size; dull green, nearly covered with russet; skin tough; flesh mild and appetizing. January to June.

Spitzenburg. Large, round; red with gray dots; delicious flavor. December to April.

Winesap. Medium; dark red; subacid, excellent. Tree a moderate grower and abundant bearer. A favorite market variety in the West. December to May.

Any of the above, Standard 3-year-old XX, $1.50 each, $15 per doz.

SULCO-V.B.

A specific for the control of San José, Red Orange, Cottony Cushion and other scale insects infesting fruit. Plant Lice, Pear Psylla, Leaf Blister Mites, Scurfy Bark Louse. Qt. 60 cts., gal. $1.75, 5 gal. $7, 10 gal. $12.50, ½bbl. (30 gal.) $25.50, bbl. (50 gal.) $37.50.

Crab-Apples

Hyslop. Large size; red in color; hardy; sharp acid flavor. September, October.

Large Yellow Siberian. Nearly as large as the above; fine amber or golden yellow.

Transcendent. All things considered, this is one of the most valuable varieties of Crab-apples grown. Tree remarkably vigorous, growing to a good size and very productive. One of the best sellers.

Any of the above, 3-year-old XXX, $1.50 each, $15 per doz.

Pears

SUMMER VARIETIES

Bartlett. Splendid flavor; large; yellow and red; good for eating or canning. September.

Clapp's Favorite. Good bearing variety. Fruit large; yellow and crimson. August.

Wilder. Regular in form, fair size and very handsome; greenish yellow with reddish cheek; flavor sweet and pleasant. August.

AUTUMN VARIETIES

Anjou. Fruit large; yellow; very little core; splendid flavor; keeps well into midwinter. November.

Beurre Bosc. Large; yellow-russeted; half-melting, high-flavored and excellent. A poor grower. September and October.

Duchesse d'Angouleme. Very large; greenish yellow, sometimes a little russeted. Makes a beautiful tree; does best on quince. One of the best. October and November.

Seckel. A splendid Pear for the home garden. Of very rich flavor; small; color brownish green with reddish cheek. September, October.

Sheldon. Medium to large; yellow and red. Very excellent and promising variety from Wayne County, N. Y. Tree a fine grower and productive; must be double worked to grow on quince. October.

WINTER VARIETIES

Lawrence. Probably the best dessert Pear for use in early winter. Fruit is of fair size, yellow, juicy and sweet; excellent for cooking or eating. December.

Kieffer. Tree a remarkable grower, with so vigorous a constitution that it rarely, if ever, blights. Fruit of fine size, rich color, and fair quality. Brings high prices in competition with other varieties, and is a great market Pear. Best when picked at maturity and house-ripened. October and November.

Any of the above, 3-year-old XXX, $2.00 each, $20 per doz.

Cherries

BIGARREAU or SWEET

Black Tartarian. Vigorous growth; very large; purplish black; one of the best. Ripening end of June.

Governor Wood. Vigorous growth; medium; clear, light red; tender and delicious. Ripening end of June.

Schmidt's Bigarreau. A most promising Cherry. Fruit of immense size, of a rich, deep black; flesh dark, tender, very juicy, with a fine flavor. Bears abundantly, and makes a most excellent dish for the table.

Windsor. Originated at Windsor, Canada. Fruit large, liver-colored.

Yellow Spanish. Large; pale yellow, with red cheek; firm, juicy and excellent. Last of June.

MORELLO or SOUR CHERRIES

Early Richmond. Medium size; dark red; juicy, rich acid flavor. The stone adheres to the stem. One of the most valuable of sour Cherries.

Montmorency (Large Montmorency). A Cherry of the Richmond class, but larger and more solid. Ripens from seven to ten days later than the Richmond.

Morello, English. Large; dark red, nearly black; tender, juicy, subacid; valuable for preserves; tree small; productive.

Three-year-old XXX, $2 each, $20 per doz.

Plums

Coe's Golden Drop. Large and handsome; light yellow, firm, rich, sweet; one of the best of the late Plums. Last of September.

German Prune. A large, long, oval variety, much esteemed for drying; color dark purple; of very agreeable flavor. September.

Imperial Gage (Flushing Gage; Prince's Imperial Gage). Fruit large, oval; skin pale green; flesh juicy, sweet, rich and excellent. Middle of August.

JAPAN PLUMS

Abundance, or **Botan.** Lemon-yellow ground, nearly overspread with bright cherry and heavy bloom; large to very large, oblong, tapering to a point; flesh orange-yellow, melting. August.

Burbank. Fruit medium to large, roundish conical; dark red or purplish, running to bright amber; flesh amber-yellow, melting, juicy, with rich sugary flavor; stone small and free. One of the best. August.

Three-year-old XXX, $2.25 each, $24 per doz.

Peaches

Belle of Georgia. Very large; skin white with red cheek; flesh white, firm and of excellent flavor; fruit uniformly large and showy. September 1 to 5.

Crawford's Early. A magnificent large, yellow Peach of good quality. Tree vigorous and very productive. Its fine size, beauty and productiveness make it one of the most popular sorts.

Crawford's Late. Very large; yellow; juicy, good; freestone. End of September.

Carman. A hardy rot-proof Peach, ripening with Early Rivers. Large, round, with pale yellow skin and red blush on sunny side; white flesh, sweet flavor.

Elberta. Large, light-colored yellow Peach; juicy, well-flavored; finest yellow freestone.

Greenboro. The largest and most beautifully colored of all the early Peaches. Of good quality; juicy; a freestone, but adheres slightly.

J. H. Hale. New. Large, late Peach. Fine.

Waddell. Fruit medium to large, oblong; skin rich creamy white, nearly covered with red; flesh white, firm, rich and sweet; freestone. Very prolific and very early.

Two-year-old XXX, 75 cts. each, $8 per doz.

Quinces

Apple, or **Orange.** Large, roundish; bright golden yellow; very productive.

Bourgeat. One of the finest yet offered. Color, rich golden, and quality extra good. Extra large.

Champion. A vigorous and productive variety. Ripening very late.

Rea, or **Rea's Mammoth.** A very large and fine variety of Orange Quince. One of the best.

Three-year-old XXX, $2 each, $20 per doz.

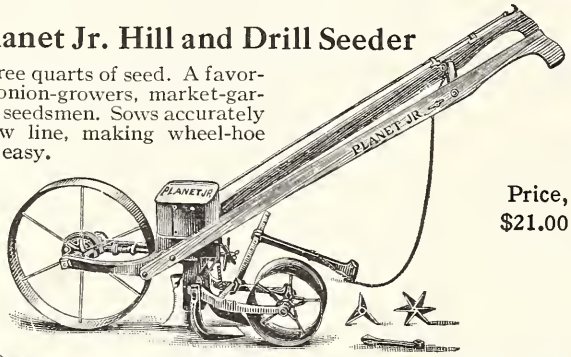
Planet Jr. Farm and Garden Tools

72-page Planet Jr. catalogue free. Describes 70 tools, including Seeders, Wheel Hoes, Horse Hoes, Harrows, Cultivators. Write postal for it

They cut down work and boost your crops. These scientific tools do the work of three to six men, give bigger yield, and save their cost in a single season. Invented and made by a practical farmer and manufacturer, with half a century's experience. Planet Jrs. are strong and lasting. Every tool fully guaranteed. Come and let us convince you of their economy. THE FOLLOWING PRICES ON PLANET JR. ARE SUBJECT TO CHANGE WITHOUT NOTICE.

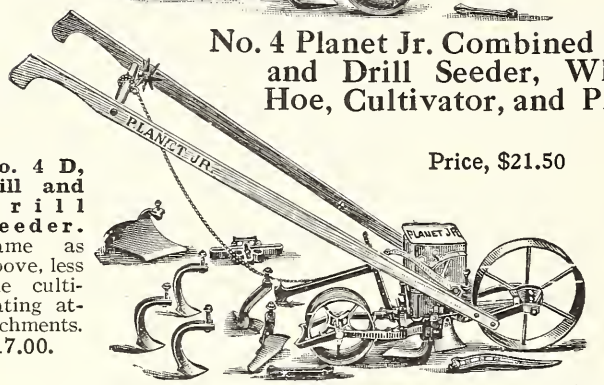
No. 3 Planet Jr. Hill and Drill Seeder

Holds three quarts of seed. A favorite among onion-growers, market-gardeners, and seedsmen. Sows accurately in a narrow line, making wheel-hoe cultivation easy.



Price, $21.00

No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator, and Plow



Price, $21.50

No. 4 D, Hill and Drill Seeder. Same as above, less the cultivating attachments. $17.00.

Soon pays for itself in the family garden as well as in the larger acreage. Sows all garden seeds (in drills or in hills), plows, opens furrows and covers them, hoes and cultivates quickly and easily.

No. 25 Planet Jr. Combined Hill and Drill Seeder, Double-Wheel Hoe, Cultivator and Plow

Price, $26.00

A splendid combination for the family garden, onion-grower, or large gardener. It is a perfect Seeder, and combined Double- and Single-Wheel Hoe.

No. 31 Planet Jr. Combined Drill Seeder and Single-Wheel Hoe

Price, $12.50

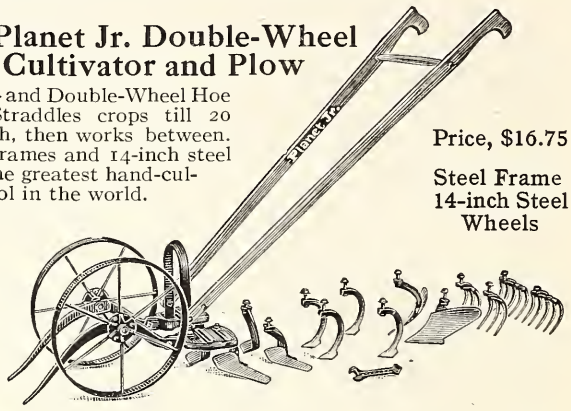
This new tool is of great value to gardeners who have never felt able to own either a Seed Drill or a Wheel Hoe. It will sow even a small packet of garden seed with great precision. Quickly changed to a splendid Wheel Hoe. A special machine for the small gardener.

No. 11 Planet Jr. Double-Wheel Hoe, Cultivator and Plow

A Single- and Double-Wheel Hoe in one. Straddles crops till 20 inches high, then works between. Has steel frames and 14-inch steel wheels. The greatest hand-cultivating tool in the world.

Price, $16.75

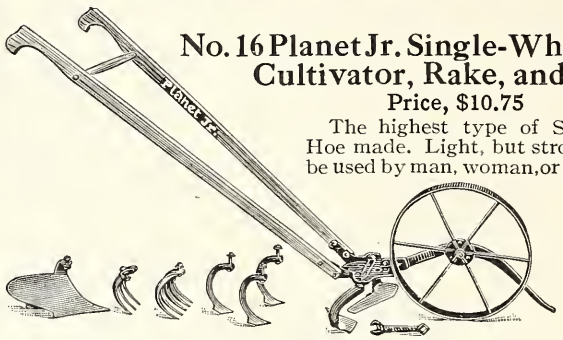
Steel Frame 14-inch Steel Wheels



No. 16 Planet Jr. Single-Wheel Hoe, Cultivator, Rake, and Plow

Price, $10.75

The highest type of Single-Wheel Hoe made. Light, but strong, and can be used by man, woman, or boy. Will do all the cultivation in your garden in the easiest, quickest, and best way.



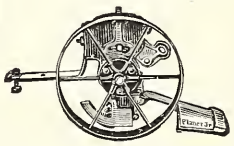
No. 17 Planet Jr. Single-Wheel Hoe. Price, $9.00

Has a pair of 6-in. hoes, a plow, and a set of cultivator teeth; sufficient for most garden work.

No. 35 Planet Jr. Seeder Attachment for Wheel Hoes and Garden Plows

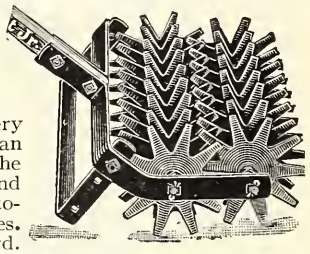
Price, $7.00

Seeder attachment with handle, $7.75



Ever since the wheel hoe has replaced the hand hoe in the kitchen-garden, there has been an insistent demand for a small seeder that could be attached to the wheel hoe. The amateur gardener did not always feel justified in buying a complete seed drill, which, while exceedingly useful, was idle a great part of the season and not particularly suited for planting short rows and in small quantities. We are now prepared to furnish the seeding attachment shown above which can be attached to any Planet Jr. Single- or Double-Wheel Hoe or Garden Plow.

Planet Jr. Star Pulverizer, Weeder, and Cultivator

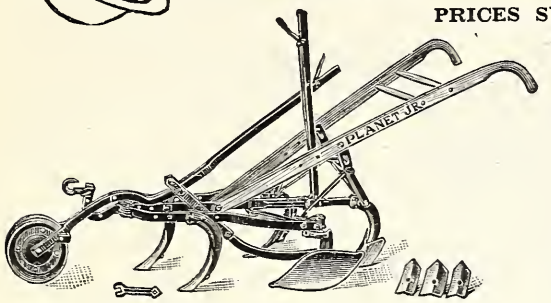


Made in two sizes. The one is very light, has one row of star discs and an oscillating blade, and is very useful in the small garden, in the flower-garden, and particularly where plants are close together. The width of cut is only 7½ inches. It can be worked backward or forward. The star discs break up the soil and the oscillating blade pulverizes it, at the same time cutting off the weeds directly beneath the surface. **Price, $4.50.**

The larger size has a 13½-inch cut, two rows of star discs, and a long handle. Just the tool for pulverizing and leveling seed-beds and hundreds of them are giving entire satisfaction to their users year after year. **Price, $7.**

Planet Jr. Farm and Garden Tools

PRICES SUBJECT TO MARKET CHANGES

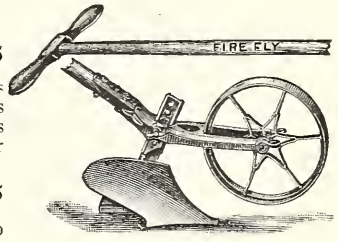


No. 8 Planet Jr. Horse Hoe and Cultivator

Price, complete, $21.50. Weight, packed, 83 lbs.

No other cultivating machine is so widely known as the Planet Jr. Combined Horse Hoe and Cultivator, for it is in use throughout the civilized world. It is so strongly built as to withstand incredible strain, yet it is light and easy to handle. It opens and closes furrows, hoes right up to the plants without danger of injuring, throws dirt to or from the row and throws back from center again. You can cultivate to any depth desired, and adjust for any width. Every part is perfected to make the tool acceptable to the intelligent farmer who knows the best is always the cheapest.

Fire-Fly Garden Plow. Price, $4.75

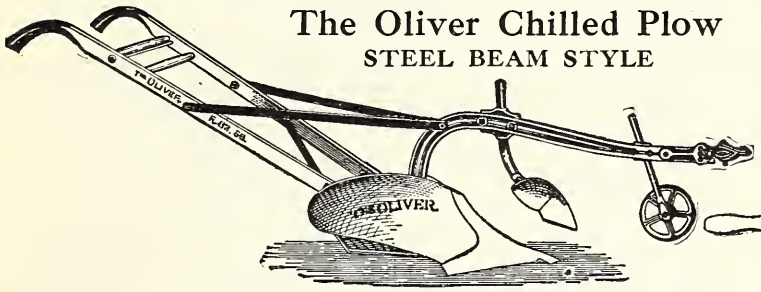


This tool is useful to owners of small gardens. It will throw a furrow 4 to 6 inches wide and 1 to 3 inches deep, and deeper by going a second time in each furrow. It opens furrows for manure or seeds and covers them, and opens up rows for all kinds of plant-setting. In cultivating, plow away lightly, allow a few days for all weeds to die, and plow back again. Chicken-raisers find it of great advantage in plowing up their scratching yards.

Planet Jr. No. 17½. Single-wheel hoe, 6-inch hoe and cultivator only $8 25
Planet Jr. No. 33. Single-wheel hoe, cultivator, and plow (Wheel Hoe equipment of No. 31 listed on preceding page) 7 00

The Oliver Chilled Plow

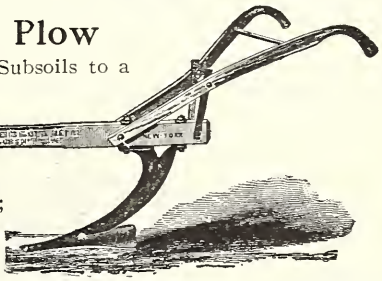
STEEL BEAM STYLE



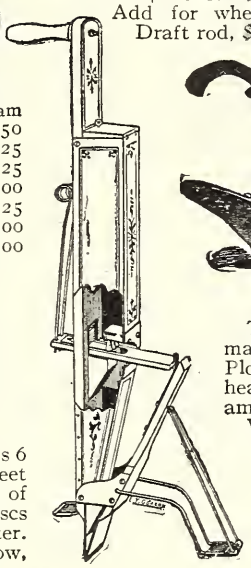
		Capacity	Wood Beam	Steel Beam
No. B-C	One-horse, light	5 x 10 in.	$12 50	$13 50
No. 10	One-horse, heavy	5½ x 11 in.	17 25	17 25
No. 19	Two-horse, medium	6½ x 12 in.	20 25	20 25
No. 20	Two-horse, medium	7 x 13 in.		23 00
No. 82	Two-horse, light	7½ x 13 in.		20 25
No. 83	Two-horse, medium	7½ x 14 in.		23 00
No. 84	Two-horse, heavy	9 x 16 in.		26 00

Plow with wheel, one-horse, wood beam, $1.65 extra.
Plow with wheel, two-horse, wood beam, $2.50 extra.
Plow with wheel, one- and two-horse, steel beam, $1.95 extra.
Plow with jointer, one-horse, wood beam, $3.60 extra.
Plow with jointer, two-horse, wood beam, $4.40 extra
Plow with jointer, one-horse, steel beam, $3.85 extra.
Plow with jointer, two-horse, steel beam, $4.70 extra.

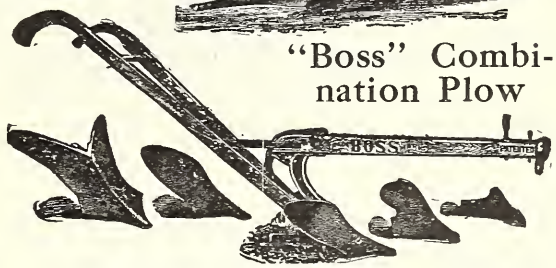
Patent Subsoil Plow



No. 16. One-horse Plow. Subsoils to a depth of 10 inches. $12.
No. 17. Two-horse Plow. Subsoils to a depth of 14 inches. $13.
Add for wheel, $2.75; Draft rod, $5.25.

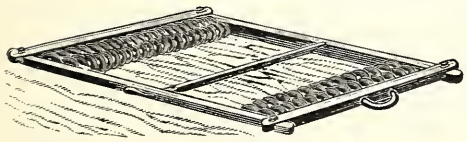


"Boss" Combination Plow



The handiest one-horse turning Plow for use by market-gardeners and farmers. Actually four Plows in one. It can be worked as a medium and heavy one-horse Plow, and as a Plow for operating among cabbage, strawberries, etc. $10.
With the double mold-board and share, $13.

Steel Disc Smoothing Harrow



The frame measures 6 feet 8 inches by 6 feet and has four sets of rollers, having 58 discs 8 inches in diameter. A very useful harrow, $40.

American Corn Planter

Is fitted with patent adjustable seed disc and brass-spring cut-off. Does accurate work. $3.25.

You Get Bigger Crops from Corrected Soils

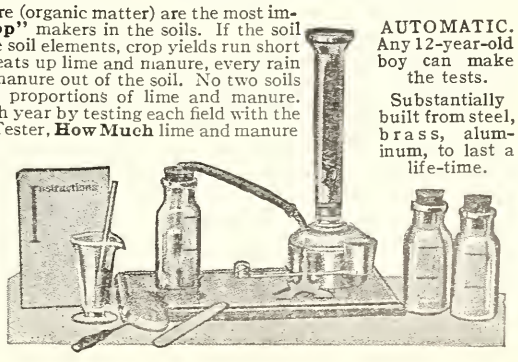
TEST AND CORRECT EVERY FIELD BEFORE PLANTING

The **"Big Crop"** Soil Test tells you whether or not any piece of land is in the proper condition to produce a **"Big Crop."** It tells in a few minutes and at the cost of 2 cents per field, how to insure the biggest results from lime and manure at the lowest cost. In detail will tell you:

Whether or not your soil needs lime and how much per acre.
Whether or not manure (organic matter) is needed.
Whether or not your soil needs inoculation for alfalfa, clovers, cowpeas, soy beans, vetch, and other legumes.
Where and where not green manuring will pay.
Which fields of your farm are best adapted to alfalfa, clovers, grain, corn, potatoes, beets, etc.
Where and where not to apply chemical fertilizers and how to use them at the least possible loss through leaching.
How to build up worn, thin, neglected soil properly and systematically.
In short, it will answer all questions as to how to put your land in the best condition for bigger crops and lasting soil fertility.

Lime and manure (organic matter) are the most important **"Big Crop"** makers in the soils. If the soil runs short in these soil elements, crop yields run short also. Every crop eats up lime and manure, every rain washes lime and manure out of the soil. No two soils contain the same proportions of lime and manure.

If you know each year by testing each field with the **"Big Crop"** Soil-Tester, **How Much** lime and manure is left, then you can add enough, where it will pay the biggest returns instead of spreading it where it is not needed and cannot be made to pay.



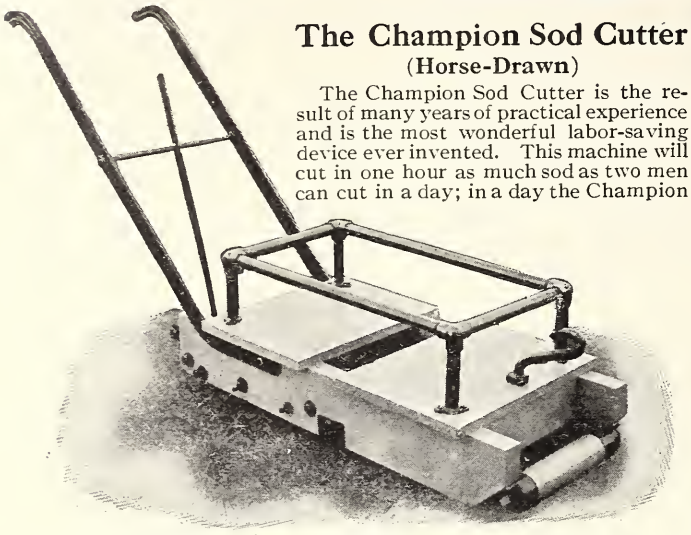
AUTOMATIC. Any 12-year-old boy can make the tests.

Substantially built from steel, brass, aluminum, to last a life-time.

Price: $12 per outfit, complete. Shipping weight, 4 lbs. A test costs 2 cents and takes 2 minutes to make

PRICES SUBJECT TO MARKET CHANGES

The Champion Sod Cutter
(Horse-Drawn)



The Champion Sod Cutter is the result of many years of practical experience and is the most wonderful labor-saving device ever invented. This machine will cut in one hour as much sod as two men can cut in a day; in a day the Champion will cut from 25,000 to 35,000 feet of sod, and at this rate you can save the price of a machine in a short while.

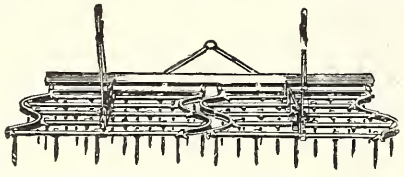
This machine is so constructed that it can be adjusted to cut the sod the one uniform thickness, 1 to 2 inches, 12 inches wide. This is very important, especially when a vast amount of sod is to be laid. One man can lay as much sod as three or four men can by the old method of cutting. $55 each.

Solid Steel Scrapers

Necessary in all golf construction work.

No.	Width	Capacity	
1	32 in.	7 ft.	$14 00
2	29 in.	5 ft.	13 50
3	26 in.	3 ft.	13 00

All-Steel Lever Spring Spike Tooth Harrow



This Harrow, having *spring action* upon the *teeth*, allows them to yield in meeting an obstruction, thus saving strain or breakage.

For One Horse.

With 25 Teeth in One Section, Spreading. 4 ft. $13 50
With 30 Teeth in One Section, Spreading. 5 ft. 15 00

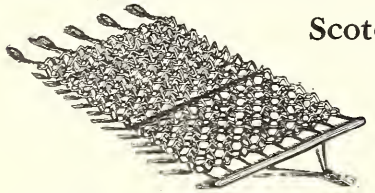
For Two Horses.

With 50 Teeth in Two Sections, Spreading. 8 ft. 27 50
With 60 Teeth in Two Sections, Spreading. 10 ft. 30 00

For Three Horses.

With 75 Teeth in Three Sections, Spreading. 12 ft. 41 00

Scotch Chain Harrow



Hundreds of wrought-iron links are woven into what is practically a blanket of chain. This arrangement is ideal in smoothing land as a final preparation for grass seeds; it may also be drawn over the soil after seeds are distributed for the purpose of covering them. Used on driveways and race-tracks, it smooths the surface, eliminating ruts and footprints. The Scotch Chain Harrow is made in three sizes, the Small for one horse, the Medium for two horses, and the Large for tractor. Small size, 5 x 6 ft., $35; Medium, 6 x 7½ ft., $45; Large, 7½ x 7½ ft., $55.

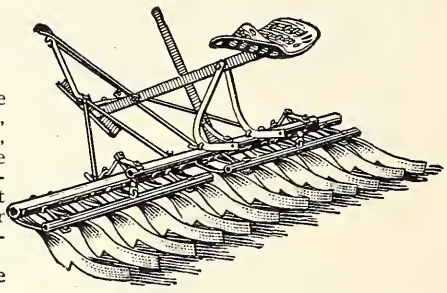
Spike Rollers

Invaluable for the greenkeeper, groundsman, and large lawn owner. The secret of fine turf is largely a matter of continued top-dressings; these top-dressings are much more effective if their application is followed by a good spike rolling and then a brushing. This places the compost *just where it is needed*, namely 1 and 2 inches down *into* the soil. An occasional spike-rolling will open "hide-bound" turf, correct the results of excessive heavy rolling, and facilitate circulation of air and moisture in the soil.

Hand Spike Roller for putting-greens, tennis-courts, and small lawns. $125.

Horse Spike Roller. For golf fairways, polo-fields, and large lawns. 3 ft. 1-horse (1,600 lbs.) $425; 5 ft. 2-horse (2,000 lbs.) $490.

Acme Pulverizing Harrow

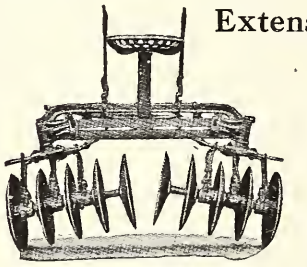


A general-purpose Harrow that crushes, cuts, turns, smooths, and levels all in one operation. For reducing clod land into that fine tilth necessary for proper seeding; valuable on fairways.

All sizes are flexible except Nos. G and H.

No.		Each
G	For One Horse, cuts 3 ft.	$14 00
H	For One Horse, cuts 4 ft., 4 in.	18 00
23	For Two Horses, cuts 6 ft., 6 in.	28 00
26	For Two Horses, cuts 8 ft., 6 in.	32 50
24	For Four Horses, cuts 13 ft., 6 in.	62 00
25	For Two Horses. For Orchards.	38 00

Extension Disc Harrow, with Reversible Gangs



Square braces take the heavy, backward thrust of the gangs. Levers are bolted to the frame and are very rigid. The frame is of angle steel, slotted to allow adjustment of gangs. These can be shifted from one side to the other or just turn them around on the pivot quickly and easily. Each With ten 16-inch Solid Discs. . . $60 00

The Bendelow Putting-Green Cultivator

A patented device by means of which turf may be aërated, top dressed and seeded. Consists of a steel frame, through the center of which is run a steel shaft on which are fastened fourteen steel circular knives. The machine is pushed over the green the same as a lawn mower, and is recommended for turf that is compacted and "hide-bound"—the result of too frequent rolling with heavy rollers. Price $100, f. o. b. Chicago.

Bendelow Putting-Green Cultivator

Rotary Soil Screens

For quickly and efficiently screening compost for top-dressing turf, also for removing stones and large particles from potting soil, sand, gravel, ashes, rotted manure, etc. Strongly made of heavy woven wire, so well balanced that very little power is necessary to operate them.

Rotary Soil Screens are offered in four models:

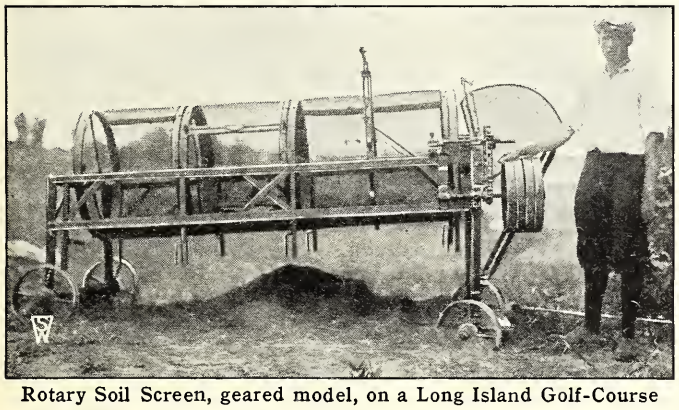
"Rotary" Geared Model. As illustrated below. Furnished with special gearing to connect with any speed engine. **$190.**

"Rotary" Standard Model. Works from any 1½ horse-power engine with a 4-inch pulley wheel running at 500 r.p.m. Identical with the geared model except that it has no chain-gear; the tight and loose pulleys are bolted directly on the driving-shaft. **$170.**

"Junior Rotary" Geared Model. The revolving cylinder consists of one section only instead of three, as in the type shown. The framework is shorter than that of the larger machine, but in other respects it is identical. The capacity is about one-quarter less than that of the larger machine. We ship in ¼-inch mesh unless any other is specified. **$150.**

"Junior Rotary" Standard Model. A one-section type without gearing. **$125.**

All the above are equipped with a crank handle which may be used should your power fail or if you use the machine only occasionally. They are easily revolved by hand. Prices are f.o.b. New York.



Rotary Soil Screen, geared model, on a Long Island Golf-Course

Capacity. Rotary Geared and Rotary Standard models will take care of average soil about as quickly as two men can shovel into the hopper, screening from 1½ to 5 cubic yards per hour, the rate depending, of course, on the condition of the material—moist, heavy soil screens slower than dry, light soil.

Junior Rotary Screens will screen 1 to 3 cubic yards per hour.

Operating. The best source of power is a kerosene engine developing 1½ horse-power with 500 revolutions per minute of a 4-inch pulley wheel. The standard models are built for this speed. All models, however, may be rotated by hand; or for the geared models power may be taken by means of a belt from the rear wheel of an automobile, from a tractor, kerosene engine, or electric motor.

Portability. Seven-inch wheels make the apparatus sufficiently portable to be of service on any part of a golf-course or estate.

Mesh. You may specify any mesh when you order. We recommend ⅛-inch, ¼-inch, and ⅜-inch as the most desirable for the three sections, and we send these unless instructed otherwise. We can supply extra screens at any time; these can be bolted in place in a few minutes. Junior models are shipped in ¼-inch mesh unless specified.

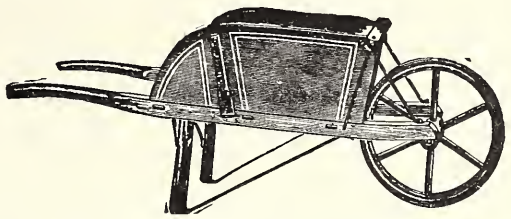
Which Machine to Purchase. We advise the large machine for construction and landscape work and for maintenance on a golf-course; also for commercial florists, contractors, and other users of soil in quantity. We recommend the Junior Rotary Soil Screen for use on private estates.

If you have an engine developing the horse-power indicated above at the specified revolutions per minute, buy the Standard type. If your power is different, describe it to us and order a Geared model.

Portable Engine. We offer an Engine which may be bolted to a stone-boat or to a wheeled carrier suitable for operating the Standard models. Uses kerosene or gasoline. **$75.**

Flat Screens

Handy for compost, soil, sands, gravel, etc. Extra-heavy wire; spruce frames, square mesh. Small size, 25 x 62 in., **$12;** large size, 28 x 66 in., **$14.** State whether ¼- or ½-in. mesh is desired.



S. & W. Co.'s Garden Barrow

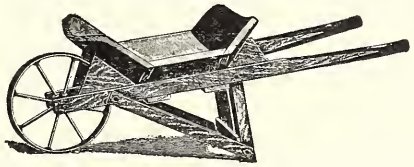
One of the most useful articles on the list of garden and lawn tools. Materials are selected oak, mortised and bolted together, strengthened with six iron braces. Made substantial, light and for long service. Wheels with 3-inch tread.

Size	Front Width	Size of Box		Rear Width	Size of Wheel		
		Depth	Length		Diam.	Tread	Price
Medium	18½ in.	12 in.	26½ in.	23 in.	20 in.	3 in.	$8.00
Regular	20 in.	12 in.	28 in.	24 in.	22 in.	3 in.	9.25

S. & W. Co.'s Boys' Barrow

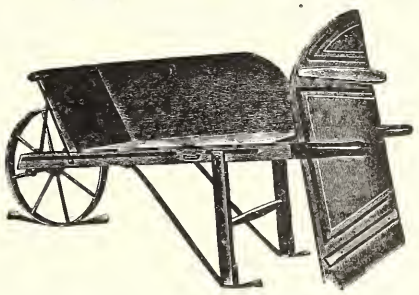
Suitable also for ladies' use. The front width is 15½ inches, box is 9 inches deep and 21 inches long, and the rear width is 18 inches; wheel diameter is 16 inches with 1½-inch tread. Just as substantially made and just as practical as the standard barrow. Price, $6.

Canal Barrow

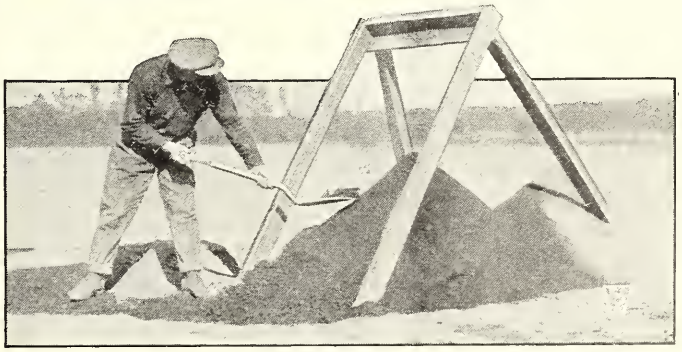


The ideal Wheelbarrow for landscape and golf construction work. The wheel is of steel and the body is strongly made, superior to the ordinary Barrow in common use. Price, $5.

Greenhouse Barrow



This is specially designed to run between the benches of a glass-house and readily to turn corners. Its body is thus constructed narrow, as also is the distance between the handles. Price, $10.



Flat Screen

Garden and Lawn Tools

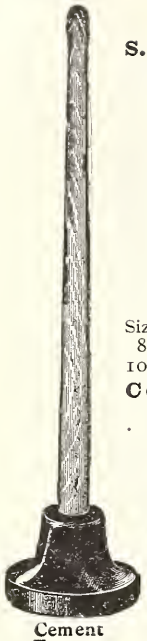
PRICES SUBJECT TO MARKET CHANGES

Tampers

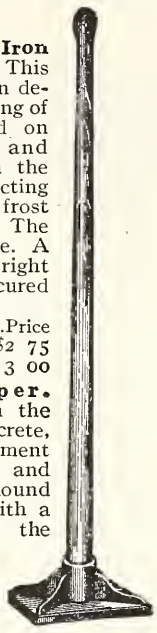
S. & W. Co.'s Iron Sod Tamper. This Sod Tamper is in demand for the laying of sod. It is used on putting-greens and terraces; also in the spring for compacting the sod after the frost has disappeared. The Tamper is square. A wooden handle of right size is firmly secured to the Tamper.

Size, ins.	Weight lbs. ea.	Price
8x8	17....	$2 75
10x10	20....	3 00

Cement Tamper. Largely used in the laying of concrete, brick and cement floors, walks and driveways. Round and equipped with a wooden handle, the same as the sod tamper. 6-in. diam., 16 lbs., $2.75 each; 6-in. diam., 24 lbs., $4 each.



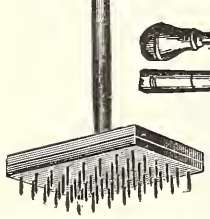
Cement Tamper



S. & W. Iron Tamper

S. & W. Sod Perforator

The best low-priced device for renovating bad spots in lawns, terraces, greens, etc. Before sowing grass seed, use the Sod Perforator. The operation permits the seed to enter the soil, where it is covered with fertilizer or by sprinkling the surface. The seed will germinate and come up uniformly, producing a vigorous growth of rich grass. The spikes are firmly set in an oak block, made in two halves and put together with screws. The handle is the right thickness and length. 12 x 12 in., $4.50.



Sod Perforator

Asparagus Knives

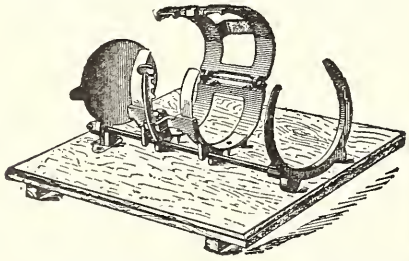
Imported English. Saw-Tooth, Plain. $1.50 each.

Highly Finished. $2 each.

American Asparagus Knives.

Straight Edge. 50 cts. each, $5.50 per doz.

V-Shape. 50 cts. each, $5.50 per doz.



Acme Asparagus Buncher

No. 1 makes bunch 3 to 3½ in. diam. $4 each.

No. 2 makes bunch 4 to 4½ in. diam. Length, adjustable, 7 to 9 in. $4.25 each.

For Garden Set of Tools, see page 162

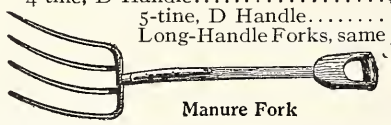
Forks

Spading Fork

Spading Forks. Best grade; tines spear-pointed with diamond-shaped backs; handle strapped both sides. Of superior quality and very strong.

	Each
4-tine, D Handle	$2 00
5-tine, D Handle	2 50

Long-Handle Forks, same price.



Manure Fork

Manure Forks. Best grade; strong oval tines.

	Each
4-tine, D Handle	$2 00
5-tine, D Handle	2 15
6-tine, D Handle	2 40

Long-Handle Forks, same price.

Hay Forks.

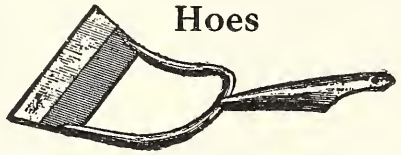
Best grade; strong oval tines, made only with long handles.

	Each
2-tine, Long Handle	$1 20
3-tine, Long Handle	1 30
4-tine, Long Handle	1 45
Boys' Spading Forks	1 25

Norcross Cultivator Hoe and Weeder

Wherever vegetables, plants and flowers are grown, these modern tools are rapidly replacing the ordinary hoe. They are made in three sizes, and can be used in wide or narrow rows. Will also cultivate both sides of a row at one operation, when the middle prongs are removed. The three-prong weeder is the women's size. They destroy weeds, leave the soil level, loose and untrampled. 5-prong, $1.10; 3-prong, 85 cts.; Midget, 45 cts.

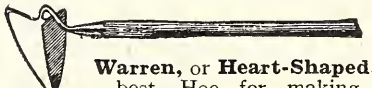
Hoes



English Scuffle Hoe. Imported. Positively the best. The quality of material used and finish is superior to all others.

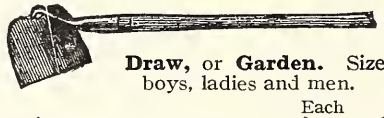
Size	Each	Size	Each
4-in.	$1 00	8-in.	$1 40
5-in.	1 10	9-in.	1 50
6-in.	1 20	10-in.	1 70
7-in.	1 30	12-in.	2 00

Extra-strong handles, 4½ ft., 50 cts.; 6 ft., 80 cts. each.



Warren, or **Heart-Shaped.** The best Hoe for making drills, covering, hoeing, and weeding.

	Each
Small size	$1 25
Medium size	1 50



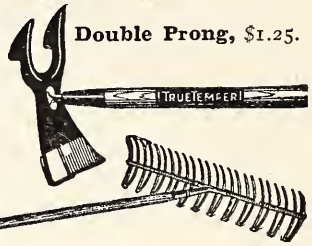
Draw, or **Garden.** Sizes for boys, ladies and men.

	Each	Doz.
5-in.	$0 90	$9 00
6-, 6½-, 7-, and 7½-in.	1 10	11 00

HOES, continued

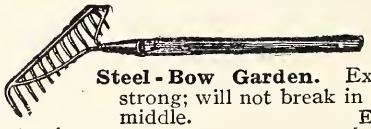
Acme Single Prong. Acme Hoes with 6-inch blade, are similar to the Warren, and are used by florists and gardeners. $1 each.

Double Prong, $1.25.



Rakes

Reversible Steel. Suitable for lawn and garden. Has 24 teeth. 75 cts. each.



Steel-Bow Garden. Extra strong; will not break in the middle.

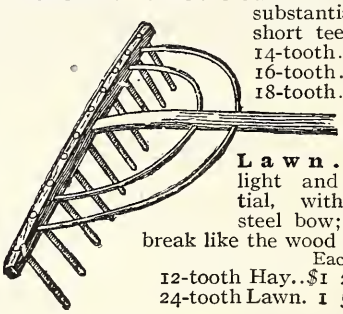
	Each
12-tooth	$1 25
14-tooth	1 40
16-tooth	1 50

Steel Garden. Cut from one piece of steel; strong and durable.

Each		Each	
10-tooth	$0 90	14-tooth	$1 10
12-tooth	1 00	16-tooth	1 25

Steel Gravel. Like the Garden Rake. Made substantial, with short teeth.

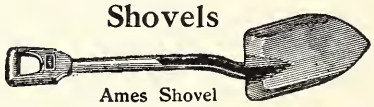
	Each
14-tooth	$1 25
16-tooth	1 50
18-tooth	1 75



Wood Hay and Lawn. Made light and substantial, with tubular steel bow; does not break like the wood bow.

	Each	Doz.
12-tooth Hay	$1 20	$12 00
24-tooth Lawn	1 50	15 00

Shovels



Ames Shovel

Ames Shovels are the best manufactured; give best service.

	Each
Square Point, D Handle	$2 50
Round Point, D Handle	2 60

Long-Handle Shovels, same price.

S. & W. Co.'s Shovels.

Square Point, D Handle	$2 00
Round Point, D Handle	2 10

Long-Handle Shovels, same price

Spades

Ames Spade

Ames Spades are the same grade as the Ames Shovels.

	Each
D Handle and Long Handle	$2 50

S. & W. Co.'s Spades are the same grade as S. & W. Co.'s Shovels.

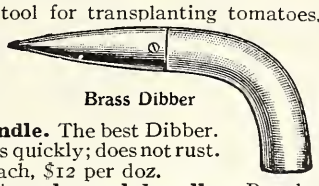
	Each
D Handle and Long Handle	$2 00
Boys' Spades	1 75

Small Garden Tools

PRICES SUBJECT TO MARKET CHANGES

Dibbles or Dibbers

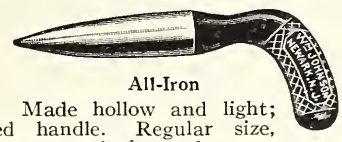
Just the tool for transplanting tomatoes, cabbage, celery, etc.



Brass Dibber

Brass point and wood handle. The best Dibber. Polishes quickly; does not rust. $1.25 each, $12 per doz.

Steel point and wood handle. Regular size, 9¾ in., $1 each, $10 per doz. Small size, 8 in., 90 cts. each, $9 per doz.



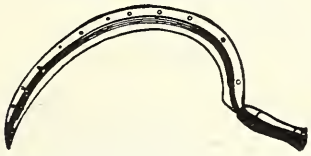
All-Iron

All-Iron. Made hollow and light; japanned handle. Regular size, 9¾ in., 90 cts. each. $9 per doz.

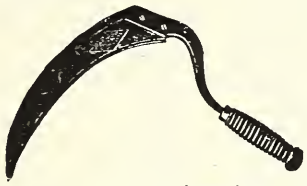
Gem Hand Fork

Has three steel prongs and finished handle. Is a handy Fork for transplanting strawberries, loosening the soil, etc. 50 cts. each.

Grass Hooks



Imported English. With heavy riveted back, thin cutting blade, easy to sharpen; forged from the best-grade steel.
No. 2, 90 cts. each; No. 3, $1 each, No. 4, $1.15 each



Blue Ribbon. Tempered steel blade; black-enameled handle. Used also for a Corn Hook and for clipping hedges. Blade can be detached and packed for parcel post. 60 cts. each, 3 lbs., packed.

Grass and Lawn Scythes

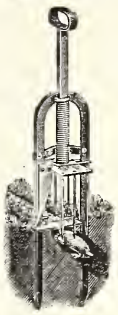
Imported English. Has a riveted back, broad, thin, light blade. Best Scythe for cutting grass, rye, oats, etc.

30-in.	$2 75	34-in.	$3 25
32-in.	3 00	36-in.	3 50

Domestic. Cutlery steel, natural oil finish, cutting edge web and backs polished.

32-in.	$2 00	36-in.	$2 40
34-in.	2 20	38-in.	2 60

Scythe Snath, or **Handle.** The very best, with patent socket. $2.25.



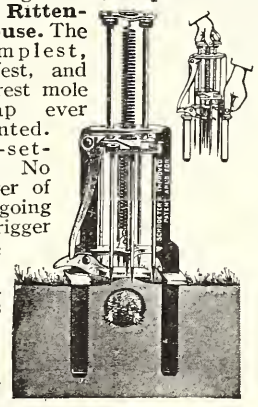
The Rittenhouse

Mole Traps

Schroeder Improved No. 1. It has a rest on top for a weight, also eight sharp prongs and a strong spiral spring. $2 ea., $20 per doz.

The Rittenhouse. The simplest, safest, and surest mole trap ever invented. Self-setting. No danger of its going off unless the trigger is touched. Made of all steel and tinned. Six in a crate. The spears are spring steel, therefore not so long as soft steel. $1.10 ea., $11 per doz.

Reddick's. $1.25 each, $12 per doz.



Schroeder Improved

Line Reel

Garden Line Reels

Malleable Iron. Holds 100 feet. $1.25.

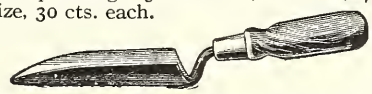
Eureka. Galvanized steel. Single, 500 feet size, $3.25. Double, 1,000 feet size, $4.

Garden Line

Best Braided Linen. 100 feet, one length, $1.50. 200 feet, one length, $2.75.

Trowels

Slim Jim. Excellent for setting bulbs or transplanting. 5-inch size, 20 cts; 7-in. size, 30 cts. each.



Forged Steel. This trowel is second to the Maynard Trowel in quality and finish. The blade and shank are one piece, forged out of the best of steel. Made in three sizes. 5-in., $1 each,; 6-in., $1.10, 7-in., $1.20.

The Maynard is the best made Trowel. The ferrule and shank, as well as the blade, are forged in one piece. Only the very best material used. 6-in., $1 each.

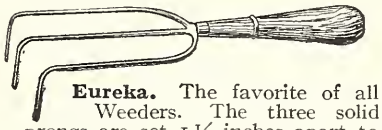
Florists' Steel Trowel

This Trowel is made in one piece of heavy sheet steel. One size only, 6-in., 50 cts. each.

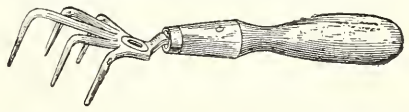
TROWELS, continued

Transplanting. Very handy for transplanting cabbage, tomatoes, etc. Solid steel shank and blade. $1 each, $10 per doz.

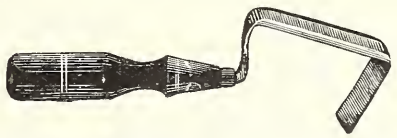
Weeders



Eureka. The favorite of all hand Weeders. The three solid steel prongs are set 1½ inches apart to allow cultivating between two or more plants at once. Short handle, 60 cts. each. Larger size, 24-inch handle, 70 cts. each.



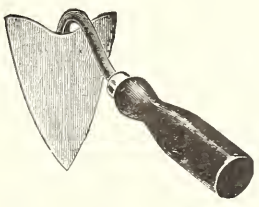
Excelsior Finger. This five-short-prong Weeder is excellent for loosening the soil in small flower-beds, etc. 35 cts. each, $3.50 per doz.



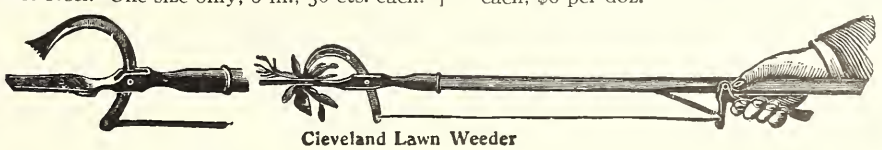
Hazeltine's Hand. Better known as Beet Weeder. A handy tool for weeding between beets, carrots, and all small vegetables and flowers. Made of 1-inch-wide spring steel 75 cts. each, $8 per doz.

Three-Cornered Onion. For weeding onions, carrots, etc. Also for cleaning between rows. 75 cts. each, $8 per doz.

Cleveland Lawn. Is simple to operate; it not only saves the back, but is actually a pleasure to use. The cut is a good illustration, showing how to work it. $1.50 each, $15 per doz.



Midget Warren Hoe. Blade and shank forged from the best quality of steel. Handle is turned, polished, and enameled. Excellent for making drills and covering; also for transplanting and weeding. 80 cts. each, $8 per doz.



Cleveland Lawn Weeder

Flower Boxes, Baskets, Pots and Fibreware

PRICES SUBJECT TO MARKET CHANGES

Corrugated Flower Box

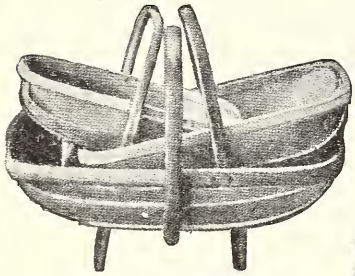
Flower Boxes

Cardboard, Flower. Ivy green; lock corners.

	Depth	Length	Width	Doz.	100
No. 1.	3 in.	18 in.	5 in.	$1 00	$6 00
No. 2.	3 in.	21 in.	5 in.	1 20	7 00
No. 3.	4 in.	24 in.	8 in.	1 60	10 50
No. 4.	5 in.	28 in.	8 in.	2 25	13 00
No. 5.	5 in.	36 in.	8 in.	3 00	16 00
Violet.—	Length	Width	Depth		
No. 5.	11 in.	5½ in.	8 in.	1 30	7 00
No. 10.	9 in.	5 in.	6 in.	1 20	6 00

Corrugated Cardboard. Very heavy and durable; extensively used by florists for shipping cut-flowers.

No.		Doz.	100
A	20 x 7 x 4 in.	$3 50	$25 00
B	28 x 8 x 5 in.	4 50	35 00
C	30 x 12 x 6 in.	6 00	45 00
D	36 x 14 x 8 in.	8 00	60 00
E	48 x 14 x 8 in.	10 00	75 00
F	36 x 12 x 6 in.	7 00	50 00



English Garden Baskets

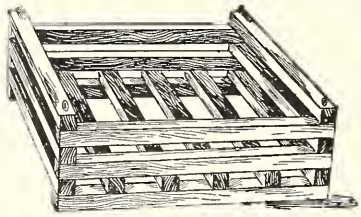
English Garden Baskets

Durable, light and handy for cut-flowers or vegetables.

No.	Length Width	Each	Doz.
2	11½ x 6 in.	$1 00	$11 50
4	15 x 8 in.	1 50	16 00
5	16½ x 9 in.	2 00	22 00
6	18½ x 10 in.	2 25	25 00
7	21 x 11 in.	2 75	30 00
8	23 x 12 in.	3 25	36 00

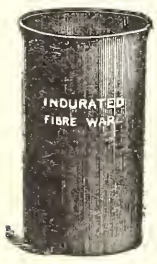
Orchid Baskets

Size	Doz.	100
6 in	$6 00	$45 00
8 in.	7 50	60 00
10 in.	10 00	75 00
12 in.	11 00	100 00



Orchid Basket

Flower Vases. FIBREWARE. Waterproof



Flower Vase

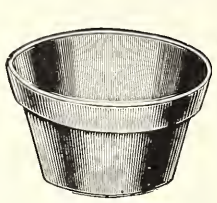
For displaying cut-flowers. Not easily broken, like earthenware; do not rust like metal Vases. Order by number. Inside dimensions are given.

No.	Depth	Diam.	Each	Doz.
0.	13 in.	8 in.	$1 80	$19 00
1.	10½ in.	5½ in.	1 65	17 00
2.	9 in.	4½ in.	1 50	15 00
3.	6½ in.	4 in.	1 30	13 20
4.	5 in.	3 in.	1 00	10 80
00.	21 in.	9½ in.	5 50	60 00
01.	20 in.	7 in.	3 50	36 00
11.	18 in.	6 in.	2 20	23 00
22.	15 in.	4½ in.	2 00	21 00
33.	12 in.	4 in.	1 85	18 60
44.	9 in.	3 in.	1 45	14 50

Azalea Pots

These pots differ from standard flower pots in that they resemble the bulb pans but are deeper. Excellent for growing bulbs for exhibition.

Diam.	Depth	Each	Doz.	100
6 in.	5 in.	$0 20	$1 80	$11 00
7 in.	6 in.	35	3 15	19 00
8 in.	7 in.	45	4 50	28 00
9 in.	7½ in.	65	6 50	39 00
10 in.	8 in.	1 00	10 00	58 00
12 in.	10 in.	2 00	20 00	113 00



Azalea Pot

Flower Pots, Standard

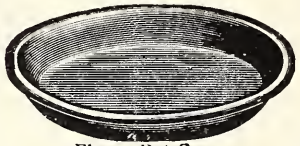
EARTHENWARE. Best on the market

Diam.	Each	Doz.	100	1,000
2 in.		$0 40	$1 60	$14 00
2½ in.		50	2 50	18 00
3 in.		70	3 50	25 00
4 in.	$0 10	1 00	5 50	38 00
5 in.	20	1 75	9 50	70 00
6 in.	25	2 25	13 00	105 00
7 in.	35	3 25	22 00	175 00
8 in.	50	5 00	34 00	250 00
9 in.	1 00	10 00	55 00	380 00
10 in.	1 25	12 00	70 00	520 00

Flower Pot

Saucers of same material, to fit Pots, furnished extra

Diam.	Each	Doz.	100	Diam.	Each	Doz.	100
4 in.		$0 50	$3 00	8 in.	$0 15	$1 50	$10 60
5 in.		60	3 80	9 in.	25	2 50	14 50
6 in.	$0 10	1 00	5 80	10 in.	30	3 00	17 50
7 in.	15	1 30	7 80	11 in.	35	3 50	21 50



Flower-Pot Saucer

Flower-Pot Saucers

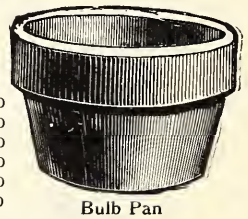
FIBREWARE. Waterproof

Light and not readily broken; have a surface that will not scratch, like earthenware. Order saucer 2 inches larger than the bottom diameter of pot.

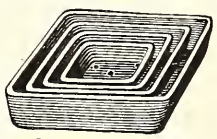
No.	Diam. outside	Each	Doz.	No.	Diam. outside	Each	Doz.
5.	5 in.	$0 30	$3 00	10.	10 in.	$0 60	$6 00
6.	6 in.	42	4 20	12.	12 in.	70	6 80
7.	7 in.	45	4 50	14.	14 in.	95	9 40
8.	8 in.	50	4 90	16.	16 in.	1 70	16 80
9.	9 in.	55	5 40	18.	18 in.	2 00	19 20

Bulb Pans. EARTHENWARE

Diam. at top	Depth	Each	Doz.	100
8 in.	4¼ in.	$0 40	$4 00	$28 00
9 in.	4⅜ in.	60	5 75	42 00
10 in.	4½ in.	80	8 00	58 00
12 in.	4¾ in.	1 65	16 50	118 00
14 in.	5 in.	3 00	30 00	200 00
16 in.	7 in.	5 50	55 00	420 00



Bulb Pan



Square Seed Pans

Square Seed Pans

EARTHENWARE

Size	Each	Doz.	100
6 x 6 in.	$1 10	$10 20	$81 00
8 x 8 in.	1 40	13 20	112 50
10 x 10 in.	1 75	17 00	135 00
12 x 12 in.	2 20	20 50	160 00

Paper Flower Pots, Neponset

Very economical; waterproof; can be nested closely for shipping.

Diam.	Doz.	100
2¼ in.	$0 12	$0 60
2½ in.	15	65
3 in.	20	80
3½ in.	25	1 10
4 in.	30	1 70
5 in.	50	2 50
6 in.	60	3 00

Paper Pot

Flower-Pot Brackets

Made of steel, artistic in design, finished in black. Saucers are absolutely secured by spring clasp.

	Each
No. 1. Length of arm, 7 in. Clasp will hold 5-in. pot.	$0 75
No. 2. Length of arm, 8 in. Clasp will hold 6-in. pot.	90
No. 3. Length of arm, 10 in. Clasp will hold 7-in. pot.	1 10

Flower-Pot Handles and Hangers (Krick's Perfect)

	Doz.
No. 0. Will fit from 2- to 3½-in. pots.	$0 60
No. 1. Will fit from 3½- to 5-in. pots.	65
No. 2. Will fit from 5- to 8-in. pots.	70
No. 3. Will fit from 8- to 12-in. pots.	75

Self-Watering Hanging-Baskets and Boxes, Thermometers and Plant-Tubs

PRICES SUBJECT TO MARKET CHANGES

Self-Watering Hanging-Basket

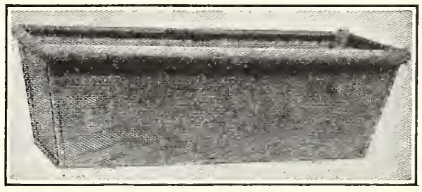
FOR BULBS. Our Self-watering Baskets and Boxes are, without question, the most satisfactory device for growing bulbs ever devised. A beautiful and certain growth, with a minimum of care.

FOR FERNS. Nearly every home-lover is a lover of ferns, but few succeed with them. They never fail in Illinois Self-Watering Flower-Boxes, or Hanging-Baskets.

Self-watering Hanging-Baskets

These Hanging-Baskets are made entirely of heavy sheet-zinc, spun into form and without seams; can be used in a library or parlor or any desired place without danger of damaging the most delicate furniture or fabric, as leaking or dripping of water is absolutely impossible. Filling the water-container is necessary but once a week, and this can be accomplished from the floor without disturbing the basket or using anything on which to stand. A strong, solid brass chain is furnished. Additional chain required charged for at 5 cts. per lineal foot. We also furnish a strong, neat bracket, suitable for hanging-baskets, bird-cages, etc. With screws, 50 cts.

Diameter 8 in. $5 25
Diameter 10 in. 6 50
Diameter 12 in. 7 75



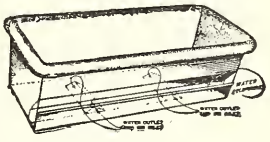
Illinois Self-watering Flower-Boxes

Remarkable for the small amount of attention required. The reservoir in bottom provides the water as needed; it is only necessary to examine the surface of the soil occasionally and, if dry, refill the reservoir. A liberal supply of air to the roots is constantly maintained through the sponges, the soil will always be found mealy and loose, and the moisture is always evenly distributed from top to bottom of soil. Do not refill reservoir unless the condition of the soil shows that watering is needed.

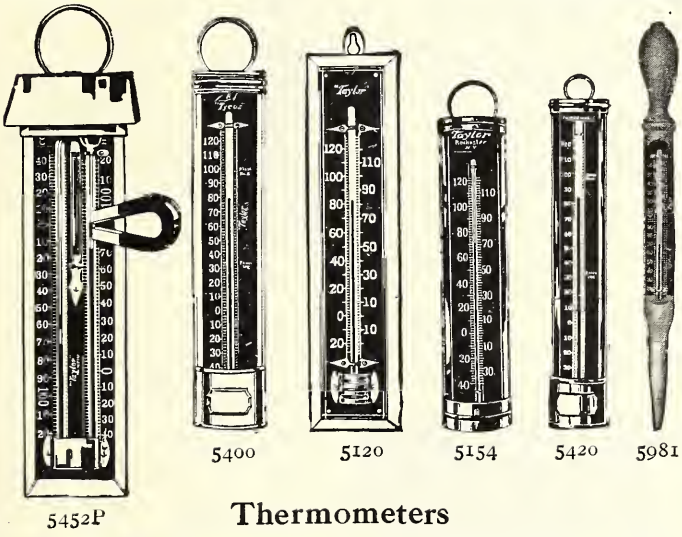
No.	Ht. in.	Wdth. in.	Lgth. in.	Cap. qts.	
1	8	9½	23	2½	$3 25
2	8	9½	25	3	3 50
3	8	9½	27	3½	4 00
4	8	9½	29	4	4 25
5	8	9½	31	4½	4 50
6	8	9½	33	5	$4 75
7	8	9½	35	5½	5 00
8	8	9½	37	6	5 25
9	8	9½	39	6½	5 50
10	8	9½	41	7	5 75

Success Flower-Boxes and Tubs

The Success Flower-Boxes and Tubs are substantially constructed of galvanized sheet steel, locked seamed and soldered water-tight. A water-pocket extends the full length of the box the tubes of which lead into the box itself. This pocket with the tubes serves the following purposes: Provides for watering the roots from below, allowing them to take up moisture as required, provides air circulation and ventilation, keeping the soil sweet and healthy; provides a perfect drainage should the plants be excessively watered by heavy rains or other causes.



	Length	Width	Depth	Each
Flower-Boxes	24 in.	8½ in.	6¼ in.	$1 50
Flower-Boxes	30 in.	8½ in.	6¼ in.	2 00
Flower-Boxes	36 in.	8½ in.	6¼ in.	3 00
Tubs	10 in.	10 in.	7¼ in.	2 00
Tubs	12 in.	12 in.	8¼ in.	2 25
Tubs	14 in.	14 in.	10¼ in.	3 00



5452P 5400 5120 5154 5420 5981

Thermometers

No. 5452P, Self-Registering. (Siexe's Pattern.) Copper case, black brass scale, white figures. **Maximum and Minimum.** 8-inch, $5.50; 10-inch, $6.50. Magnet with each.

No. 5400. Black japanned heavy tin case; brass scale, white figures. (Mercury.) Scale range, 10 to 40 degrees below zero to 120 above. **Standard Grade.** 8-inch, $1.40; 10-inch, $1.60.

No. 5420. Black japanned heavy tin case. For greenhouses. Black oxidized brass scale, white figures. (Spirit.) 8-inch, 90c.; 10-inch, $1.

No. 5154. Copper case; distance reading. Black oxidized brass scale, white figures. (Spirit.) Scale range, 120 degrees above to 40 degrees below zero. 8-inch 70 cts.; 10-inch, $1.

No. 5120. Distant reading. Wood-back Mission finish, brass scale, white figures and graduation. (Spirit.) Easy to read at distance. 8-inch, $1.25; 10-inch, $1.50.

No. 5981. Hotbed. Wood frame, 16 inches, with point. Brass oxidized scale, white figures and graduations. Best grade, $2.25.

TUBS

Plant-Tubs, New York Cedar. Made of the choicest seasoned cedar, highly finished with black hoops: will last twice as long as cypress.

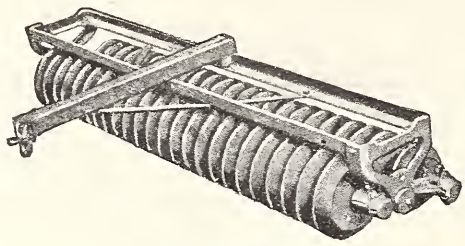
No.	Diam.	Height	Price
1	12 in.	10½ in.	$2 50
2	13 in.	13 in.	3 50
3	14½ in.	15 in.	4 25
3½	16½ in.	15¼ in.	5 50
4	19½ in.	17 in.	$6 00
5	22½ in.	18½ in.	7 50

Barclay Tree Tubs. Made of seasoned, selected Virginia White Cedar; bound with electric-welded wire hoops (galvanized), three hoops to each, except the smallest two tubs which have two.

No.	Top Diam. inches	Inside Depth inches	Price Each
1	6	6	$0 70
2	7	7	75
3	8	8	80
4	9	9	90
5	10	10	1 20
6	11	10	1 40
7	12	11	1 60
8	13	12	2 00
9	14	13	2 50
10	15	14	3 00

New York Cedar Tub

PRICES SUBJECT TO MARKET CHANGES

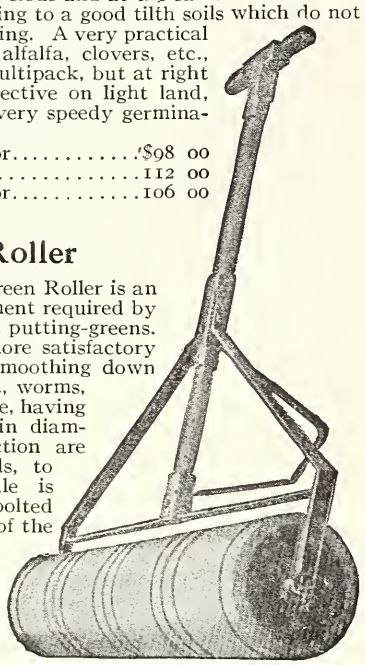


Cultipacker

This implement will break up clods and at the same time firm the soil; it is of great value in reducing to a good tilth soils which do not respond to the harrow after plowing. A very practical method of sowing grass seeds, alfalfa, clovers, etc., is to cultipack, sow, and again cultipack, but at right angles. This is particularly effective on light land, the rolling effect resulting in a very speedy germination.

8 ft. wide, equipped for tractor.....$98 00
8 ft. wide, equipped for horse.....112 00
9 ft. wide, equipped for tractor.....106 00

Putting-Green Roller



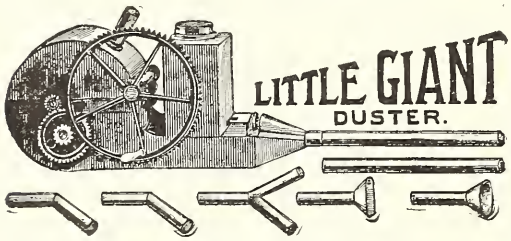
The S. & W. Co.'s Putting-Green Roller is an indispensable part of the equipment required by golf clubs in maintaining perfect putting-greens. This Roller being of wood is more satisfactory for gathering worm-casts and smoothing down all uneven spots caused by frost, worms, ants, etc. The roller is 4 feet wide, having four 12-inch sections, 10 inches in diameter. The ends of each section are banded with 2-inch steel bands, to prevent splitting. The handle is reinforced with steel braces, bolted to solid cast heads on both ends of the roller. The S. & W. Co.'s Putting-Green Roller is endorsed by many of the best golf clubs of America. The net and shipping weight is 186 lbs., $22.50 each.

Wheelbarrow Powder Sower

For an illustration of this we would refer to page 49 of this catalogue. It is identical in appearance with our Wheelbarrow Grass Seeder; in fact, we offer a hopper that is interchangeable with it.

Complete machine for distributing powder only.....$16 90
Special Hopper to use with our Wheelbarrow Seeder..... 11 00
Combination Seeder and Powder Distributor..... 27 00

For an illustration showing this machine at work, our golfing friends are referred to page 115 (April 26, 1922) of the Bulletin of the Green Section of the U. S. Golf Association.



Powder Duster

For applying Dry Bordeaux Mixture, Soot, or Tobacco Dust to lawns, also Paris Green, Arsenate of Lead, etc., to potatoes and other vegetables, tobacco, cotton, etc. Made so strongly that, with average care, the machine will give efficient service for many years. Price, $12.

S. & W. Co.'s Reenforced Nursery Spade

A well-made Spade, being strongly and heavily strapped close up to the "D" handle. For all-round garden work, and will last a lifetime. Price. $2.50.

How Early Birds are kept busy on the country's leading golf-courses

Early Bird Rakes

The Early Bird Putting-Green Rake has been found to be a better, more efficient, and economical implement for cleaning the greens than any yet on the market. It will leave the green smooth and clean. The Early Bird Rake is unqualifiedly endorsed by leading golf professionals, golf-course experts, greenkeepers, and players who appreciate the importance of a perfect putting surface.

We offer it in two sizes.

No. 0A6. Width, 30 in.; weight, 8¼ lbs.....$8 each
No. 0A2. Width 24 in.; weight, 4½ lbs..... 4 each

Little Wonder Hedge Trimmer

A well-designed machine which entirely revolutionizes hedge-trimming. It actually cuts a hedge as fast as you walk, and in an hour will trim the top and two sides of a hedge 300 feet long; this is from five to ten times as fast as hand-work.

The cutting blades are of tough steel, holding a sharp edge for a long while and trimming every variety of hedge grown. Use it for trimming, and not for "cutting back" a hedge, and it will last for years. 30-inch one-man Trimmer $20; 40-inch one- and two-man Trimmer $25; 60-inch two-man Trimmer $30.

George Low Sand Rake

For Traps on a Golf-Course

Invented by one of the best-known golf pros. in the country. Ridges the sand, prevents the ball being teed up in the sand, compels a player to use his niblick instead of rolling his ball with a putter. Gives the traps a wonderful appearance. Price, $2.50, doz. $27.50.

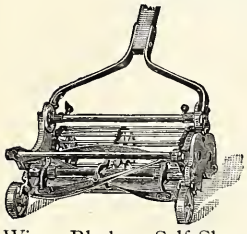
The Complete Garden

A New Book on Landscape Gardening

Tells what, when, and how to plant in any place, for any purpose. Every phase of harmonious landscape architecture and gardening, in a book of more than 400 pages with numerous illustrations. The Complete Garden. By Albert Taylor, M.S.A. $6, postpaid.

Grass Seed and Fertilizer Sowers

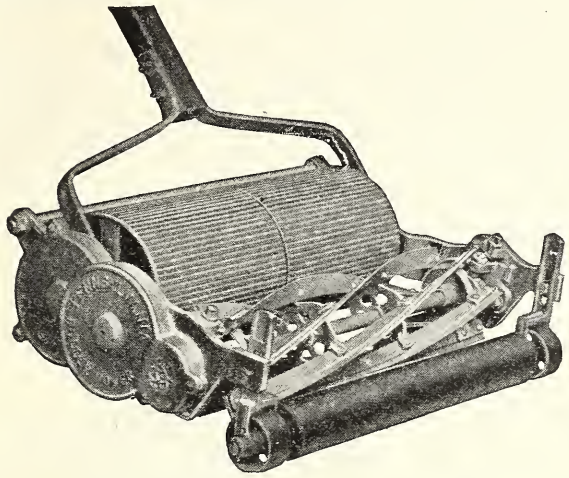
PRICES SUBJECT TO MARKET CHANGES



Easy Lawn Mower

For borders, mounds and terraces

The only Mower made that will cut borders, mounds, terraces, close to walls and fences, and all kinds of uneven surfaces. Advantages: Front Cut. Steel Open Roller. Noiseless in operation. Detachable Handle. Lipped Edge Stationary Knife. Drawcut Wiper Blades. Self-Sharpening. Self-adjusting Ball Bearings. Price, 12-inch, $21; 14-inch, $24, 16-inch $27.



Pennsylvania 7-Inch Roller Mower

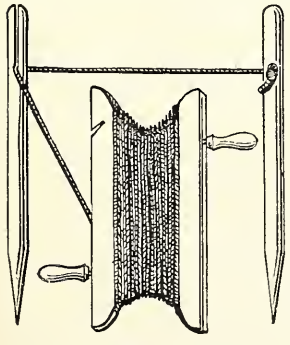
The Pennsylvania 7-inch Roller Mower is substantially constructed of steel, malleable and cast. The parts are accurately machined, insuring an easy running and noiseless Mower. This machine is designed to cut grass on borders, terraces, and undulating greens. It will clip as close as $\frac{3}{16}$ of an inch and cuts satisfactorily where grass is not allowed to exceed 2 inches in height. This Roller Mower has six revolving blades of crucible tool steel, oil hardened and oil tempered.

Size	Gross weight	Net weight	Price	Grass Box
16-inch cut	88 lbs.	66 lbs.	$35 00	$8 00
18-inch cut	94 lbs.	71 lbs.	39 00	8 00

Bamboo Rakes for cleaning lawn, $2 each.

Pennsylvania Ball-Bearing Lawn Trimmer

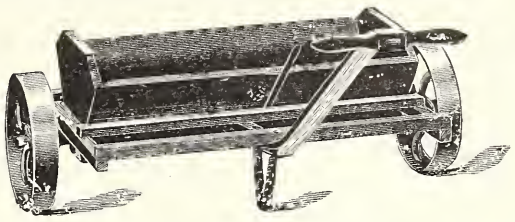
Made to meet the demand for a serviceable tool to take the place of grass shears and other devices for cutting grass left at the edge of lawns, around flower-beds, etc. Will cut to within ⅜ of an inch of walls, fences, walks, etc., and will mow any border wide enough to run one wheel on. High 8-inch wheel; runs easily; self-sharpening. Width of cut 6 inches; gross weight 26 lbs.; net weight 20 lbs. Price, $11.50.



The Never Tangle Garden Line Reel

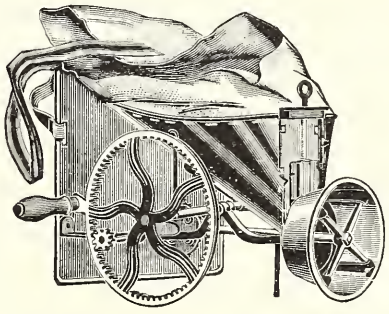
It is practical; the average gardener uses a garden marking line. He ties 150 or 200 feet to two sticks, winds slowly on one of them and puts up with tangles and knots as best he can This Reel will wind or unwind quickly and keep the line straight. It is strongly made, works easily and will last for a long time. Price, 90 cts., postpaid.

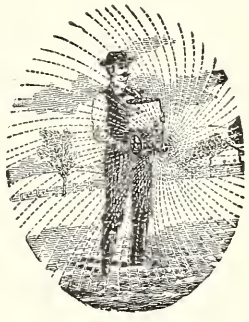
See page 166 for Stumpp & Walter Co.'s Ball-Bearing Lawn Mower



Stevens' Fertilizer Sower for Top-Dressing Lawns

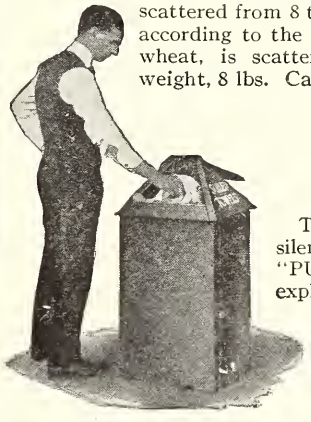
Has the same adjustment as the horse-power machine and will sow all commercial fertilizers. The hopper is 34 inches long and holds one and one-half bushels. Besides top-dressing lawns, greens, etc., it is a handy machine for all kinds of garden and field work. When two blades are removed, it will sow damp sand. Also is an excellent machine in the winter for covering icy roads and walks with sawdust, sand, etc. Shipping weight, 83 lbs. Price, $30.





Cahoon's Improved Broadcast Seed Sower

This is the only Broadcast Seed Sower that has come to stay. It is well known as a practical and cheap broadcaster. Wheat, rye, oats, barley, hemp, timothy, millet and Hungarian grass are used in this Seeder. The operator can sow from four to eight acres an hour, walking at an ordinary gait. The seed is scattered from 8 to 20 feet on each side of the operator, according to the kind of seed. The heavy seed, like wheat, is scattered the greatest distance. Packed weight, 8 lbs. Can be sent by parcel post. Price, $5.25.



Solar Self-Closing Receptacle

The swinging door, so easily operated, silently invites "Put it here." The word "PUSH" on the twin doors immediately explains the method of using when installed. Here is a receptacle for such articles which has the neatness, the dignity, and attractive appearance which blends with the most pretentious surroundings.

No.	Size	Can height	Total height	Each
5	9 x 9 in.	13 in.	17½ in.	$5 25
10	11½ x 11½ in.	17¼ in.	23⅛ in.	6 25
15	11½ x 11½ in.	34 in.	40 in.	9 25
30	16 x 16 in.	25½ in.	35⅝ in.	8 90
50	21 x 21 in.	36 in.	47⅝ in.	13 00

Miscellaneous Garden Supplies

PRICES SUBJECT TO MARKET CHANGES

Aprons, Gardeners'. English made. Each
Fine shalloon, 39-in., with bib and pocket.....$4 00
Fine shalloon, 42-in., with bib and pocket..... 4 50
Heavy serge, 39-in., with bib and pocket..... 3 75
Heavy serge, 42-in., with bib and pocket..... 4 25

Heavy Canvas Aprons, $1 each, $10 per doz.

Broom, Bamboo. Excellent for sweeping lawns, putting-greens, and walks. Made of bamboo. $1.50 each, $15 per doz.

Birch Brooms. Superior make, 75 cts. each, $7.50 per doz.; with handle $1.25 each, $12.50 per doz.

Carnation Supports. Model Extension, 2-ring, $1.10 per doz., $7.50 per 100; 3-ring, $1.35 per doz., $8.50 per 100.

Carnation Bands, Rubber. Prevents splitting. 25 cts. per oz.

Clips, Eureka. For fastening rose and chrysanthemum wire stakes. $1.40 per box of 500, $2.25 per box of 1,000.

Corn Knife. For cutting cornstalks or heavy grass. 60 cts. each, $6.50 per doz.

Fumigators. See page 174.

Gloves. Made substantially of horse-hide; heat- and water-proof; made with gauntlets. Good Gloves for pruning and general farm-work.
No. 131. All leather. $2.50 per pair.
No. 186. Ladies'. $2 per pair.

Glazing Materials

Permanite is a glazing compound composed of asbestos fiber and special long-life, weather-resisting, non-drying oils, which always keep it in an elastic condition and never allow it to harden. Little needs to be said about the addition of asbestos as the advantage of using this material—its indestructibility and ability to resist heat and cold—are too well known. 1 gal. $2.50, 5 gals. $2.40 per gal., 15 gals. $2.25 per gal., 35 gals. $2.10 per gal., 60 gals. $2.10 per gal.

Permanite Gun. This Gun makes application of Permanite easy. Further particulars on request. $6.50 each.

Putty Bulb, Scollay. A useful tool similar to the well-known Scollay Sprinkler, with a tube instead of spray for applying liquid putty in glazing greenhouses. $1.50.

Glazing Points, Van Reyper's. No rights or lefts. No. 2, large, for single- and double-thick glass for greenhouses and skylights. Box of 1,000, 75 cts.; 5,000 for $3.25.
Pincers or pliers for same, 50 cts.

Red Devil Glass Cutter. 25 cts., 35 cts., and 50 cts.

Putty Knife. No. 100. A very good tool. 50 cts. each.

Grafting Wax. ¼lb. 20 cts., ½lb. 35 cts., lb. 65 cts.

Knives, Turf-Edging, Budding and Pruning

Solid Welded Steel Edging. Socket handle; made of the very best steel; imported English. 8-inch, $2.50; 9-inch, $3. Each
Half-Moon. Solid steel, with a polished handle.....$1 25
Planet Jr. Disc Edger..... 2 00

Pruning—

No.		Each
1.	Cocoa handle. 1 blade.	$1 50
2.	Ebony. 1 blade.....	3 00
3.	Stag. 2 blades.....	2 75
4.	Cocoa. 1 blade.....	2 50
5.	Cocoa. 2 blades.....	3 25

Budding—

No.		
A.	Ivory handle. 2 blades..	$3 00
B.	Bone, S. & W. 1 blade..	2 00
C.	Ivory, S. & W. 2 blades..	2 25
D.	Ivory. 1 blade	2 50
E.	Ivory. 2 blades.....	2 75
F.	Bone. 1 blade.....	1 25

Kunde Knives, Budding and **Pruning.** Two blades; brass lined; polished wooden handle, $3.

Kunde Knives, Budding. One blade; brass lined with polished wooden handle, $2.

Hotbed Sash and Frames

Stumpp & Walter Co.'s Standard Frames are made of selected Gulf Cypress, free from knots and sap. Frames are dressed and finished with two coats of gray paint. The four corners are securely held with angle irons and bolts. Easily taken apart when necessary to store or ship them. The rails between the sash are rabbeted and grooved for drip, and dovetailed into the sides. The back depth of frame is 16 inches, front depth 8 inches. This provides the necessary pitch to carry away rain and snow. Frames are made for 2, 3, 4 and 5 sash When frames for only one sash are desired, we recommend the frames used for half-sash.

HOTBED SASH AND FRAMES, continued

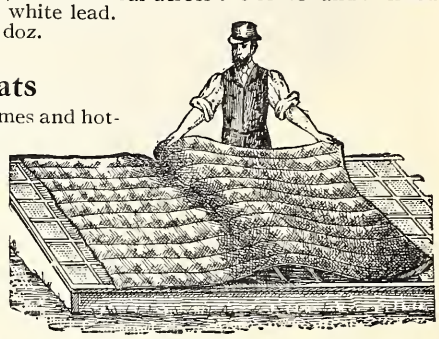
No. 2 Frame. For two 3 x 6 ft. sash $15 00
No. 3 Frame. For three 3 x 6 ft. sash 21 00
No. 4 Frame. For four 3 x 6 ft. sash 26 00
No. 5 Frame. For five 3 x 6 ft. sash 31 50

Single Light Sash. Stumpp & Walter Co.'s Single Light are standard size, 3 x 6 feet. Made of selected cypress, 1⅞inch thick, free from knots and sap. Mortised and leaded joints. Three rows of 10 x 12-inch double-thick glass, iron cross-bar across the center. Made extra strong and durable. Finished with two coats best white lead $8 each, $90 per doz.

Double Light Sash. Stumpp & Walter Co.'s Double Light or Double-Glazed Sash are made with two layers of glass, providing an air chamber or insulator, which keeps the warmth in and the frost out. With the Double Light Sash it is not necessary to use mats or covering in severe cold weather, thus eliminating the expense of mats and the regularity of covering and uncovering the sash. In locations where snow is frequent or stays long it does not interfere with the Double Light Sash, providing the snow is cleaned off. The plants receive the benefit of the sunlight and grow uninterruptedly. The sash are standard size, 3 x 6 feet, 1⅞inch thick. Made of clean Gulf Cypress, free from knots and sap. Mortised and leaded joints. Three rows of 10 x 12-inch double-thick glass. Strengthened with a ¾-inch iron bar across the center and finished with two coats of best white lead.
$14.50 each, $165 per doz.

Hotbed Mats

For protecting coldframes and hotbeds. Warmly lined with waste wool and cotton, which are quilted in to hold position.
No. 1. 40 x 76 in. Burlap on both sides. $2.50 each, $27 per doz.
No. 1. 76 x 76 in. Burlap on both sides. $3.50 each, $36 per doz.



Simplex Waterproof Plant Labels

The writing is protected by the transparent cover and will last indefinitely if done with lead pencil.

	Doz.	100
No 1. 3 x ½ in.....	$0 30	$3 00
No. 2. 4 x ¾ in.....	60	6 00
No. 3. 5 x 1 in.....	80	8 00

Label Varnish. Waterproofs wooden labels. ½pt. 60 cts., pt. $1.10, qt. $2.10, ½gal. $3.90, gal. $7.50.

S. & W. Co.'s Permanent Label Holder

This Label Holder is finished with an index card covered with mica, making it absolutely rust-proof, finished in iron, galvanized and japanned green. Stake 24 inches high. No. 10 card, 2¾ x 1½ inches 25 cts. each; No. 11 card, 3 x 2 inches 30 cts. each.

Pot or Garden Labels

Wooden—

	Painted 100	Painted 1,000
4-inch.....	$0 35	$2 00
4½-inch.....	40	2 25
5-inch.....	45	2 50
6-inch.....	60	3 00
8-inch.....	1 25	9 00
10-inch.....	1 35	11 00
12-inch.....	1 60	13 25

Copper-wired—

3½-inch.....	65	3 00

Zinc Garden. These are unsurpassed, being neat, durable, and indelible. The ink marks a jet-black, which remains distinct. Use a clean quill or pointed stick.

No.		Doz.	100
1.	4¾ x 3½ in.	$0 60	$3 00
2.	4 x 2¾ in...	40	2 00
3.	4 x 3 in.....	50	2 00
4.	5 x 1 in.....	40	2 00
5.	3½ x 2½ in.	50	2 50
6.	2¼ x 2 in....	$0 35	$1 75
7.	2¾ x ⅞ in...	25	1 25
13.	2¾ x 1¼ in..	30	1 50
14.	1½ x 1¼ in..	30	1 50
15.	4¼ x 4¾ in..	35	1 75

Miscellaneous Garden Supplies

PRICES SUBJECT TO MARKET CHANGES

Label Pencils. Permanent writing on wooden labels. 15 cts. each, $1.50 per doz. X-L-All Indelible, 25 cts. each, $2.50 per doz.

Label, Indelible Ink. For zinc labels. 40 cts. per bottle.

Nails, Vine or **Wall.** Made with soft, pliable, lead clip for fastening vines to walls, houses, trellises, etc. Will give before cutting vines as they grow. 1¼-in., $2 per 100; 1½-in., $2.50 per 100; 2-in., $2.75 per 100.

Netting. Bird netting to protect all small fruits and vegetables. A good quality of cotton netting, 1-inch mesh, only in 20- and 30-ft. widths and of any reasonable length. $2 per 100 square feet.

Paper—

Wax. 24x36. Ream ...$4 00
18x24. Ream 3 00
Tissue. 24x36. Ream. 2 50

Manila. 24x36. Ream ...$4 00
Wrapping. 40x48. Lb... 14

Wrapping. In rolls, Widths 24 in., 30 in., 36 in., 48 in. Weight approximately 50 lbs. Kraft or Manila, lb. 14 cts.

Plant Sprinkler, Scollay. Made of the best rubber. Straight neck, $1.50; angle-neck, $1.60.

Post-Hole Diggers, Samson. 56 inches, $6.
Rapid. 59 inches, ash handle, $5.

Post-Hole Auger. 6-in., $2; 8-in., $2.25.

Raffia, Natural. For tying plants. Lb. 50 cts., 5 lbs. $2.
Colored. All colors. For basket-making. Lb. $1.25.

Scythe Stones, Genuine English. Round, tapering. 75 cts. each.
Genuine Carborundum. No. 190, 40 cts., No. 192, 50 cts.
Red-End. 15 cts. each, $1.50 per doz.

Scythe Rifles, Emery-coated. 25 cts. each, $2.50 per doz.

Scissors, Grape-thinning, $1.50; **Flower-gathering,** $2.25.

Silkaline. See Twines.

Shears. See page 164.

PLANT STAKES AND SUPPORTS

Bean Poles. Excellent for staking Pole Lima Beans. 30 cts. each, $3.50 per doz., $25 per 100.

Plant, Tapering, Green—

	Doz.	100		Doz.	100
1½ feet	$0 35	$2 25	3½ feet	$1 50	$9 20
2 feet	60	4 00	4 feet	1 60	11 00
2½ feet	80	5 20	5 feet	2 10	14 50
3 feet	1 10	7 25			

Carnation Supports. See page 160.

Chinese Tonkin Cane. These are Chinese canes, very strong and heavy.

	100	1,000		100	1,000
2 feet, heavy	$1 50	$10 00	6 feet, heavy	$5 50	$50 00
3 feet, heavy	2 00	15 00	7 feet, heavy	6 50	60 00
4 feet, heavy	3 00	25 00	8 feet, heavy	7 50	70 00
5 feet, heavy	4 50	40 00	10 feet, heavy	8 50	80 00

Japanese Cane. For staking plants and trees.

	100	1,000		100	1,000
6 feet	$2 00	$17 50	14 feet	$22 00	$200 00
8 feet	4 50	40 00	16 feet	35 00	300 00
10 feet	5 50	50 00	18 feet	40 00	350 00
12 feet	18 00	160 00	20 feet	50 00	450 00

Dahlia Poles—

	Doz.	100		Doz.	100
3 feet	$1 80	$11 50	4 feet	$2 25	$15 50
3½ feet	2 00	13 50	5 feet	2 75	19 50
			6 feet	3 50	24 50

Galvanized Wire—

	100	1,000		100	1,000
3 feet	$2 00	$17 50	4½ feet	$3 25	$27 50
3½ feet	2 50	20 00	5 feet	3 50	30 00
4 feet	2 75	22 50	6 feet	4 00	35 00

Tomato Supports, Wire. 32 inches high, 14 inches in diameter, made of heavy steel wire. 40 cts. each, $4 per doz., $28 per 100.

If you cannot locate any tools or implements you desire, refer to Index, page 176. Our Implement and Poultry Catalogue free on request.

Twines

S. & W. Co.'s Smilax Thread. This Thread is very strong, green in color and warranted not to fade. Best Thread on the market. 25 cts. per spool, $1.50 per 8 spools, $4 per box of 24 spools.

Silkaline. Very largely used for tying. Three sizes, F, FF, and FFF. 40 cts. per spool, $3 per box of 8 spools.

Bouquet Twine. White. 3 oz. balls 20 cts. each, $1 per lb., $4.50 for 5 lbs.

Sea Island Cotton. Green. Ball, 15 cts.; box of 8 balls, $1.

Twine, Soft. For tying vines, etc.; very strong, 2- and 3-ply. Ball 20 cts., 3 balls 50 cts., 12 balls $1.80.

Tarred Yarn. Excellent, low-priced material for raspberries, shrubs, etc. Ball (1 lb.) 40 cts., 5 balls $1.75.

Wire, Bouquet, Florists' Annealed. Nos. 22 and 24. In coils of 12 lbs., $4 per coil.

Florists' Bright. Cut in lengths. In boxes of 12 lbs. (one stone). 12 in. and 18 in. long. No. 22, $2.25; No. 24, $2.50.

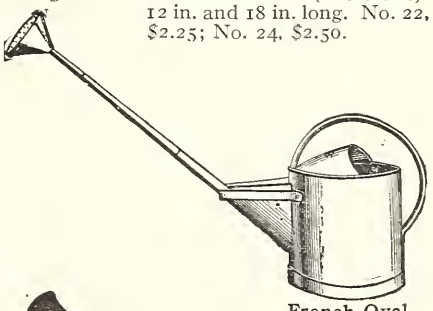
Watering Pots

Heavy galvanized iron, reinforced; made well and substantially. Each pot has a long spout, with one fine and one coarse rose.

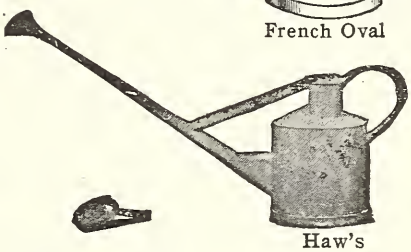
Round Pattern.
6-quart.....$4 75
8-quart.....5 00
10-quart..... 5 50
12-quart..... 6 00

French Oval Pattern.
6-quart.....$5 50
8-quart..... 6 00
10-quart..... 6 25
12-quart..... 7 00

Haw's Pattern.
No. 0, 2-quart ...$4 50
No. 1, 3-quart.... 5 50
No. 2, 4-quart.... 6 00
No. 3, 6-quart ... 7 00
No. 4, 8-quart.... 8 00
No. 5. 10-quart... 9 00

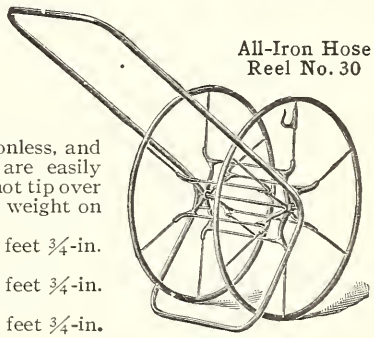


French Oval



Haw's

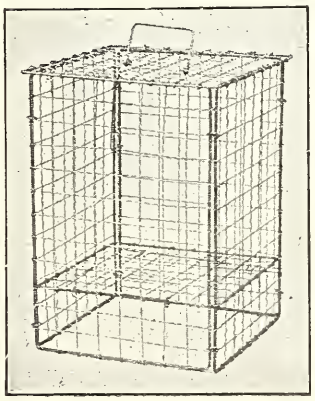
All-Iron Hose Reel



All-Iron Hose Reel No. 30

The All-Iron Hose Reels are constructed entirely of iron, and are indestructible. They are light in weight, frictionless, and the wheels being high, they are easily manipulated. These Reels cannot tip over when unreeling and there is no weight on the handle.

No. 10, 21-in. wheel, holds 100 feet ¾-in. hose, $5 each.
No. 20, 24-in. wheel, holds 150 feet ¾-in. hose, $5.50 each.
No. 30. 30-in. wheel, holds 500 feet ¾-in. hose, $9 each.



Burners for Leaves, Paper and Rubbish

The best receptacle used for burning leaves, papers, and all kinds of rubbish. This handy knock-down Burner is a safeguard against many fires that have their origin in the burning of rubbish in the open. The Burner is extra strong, manufactured of heavy galvanized steel wire, reinforced with iron supports. Made to give life-long satisfaction. We supply this Burner in two sizes.

No.	Square	Height	Weight	Each
1	15 in.	15 in.	22 lbs.	$3 00
2	17 in.	17 in.	20 lbs.	4 00

BASKETS AND GARDEN TOOLS

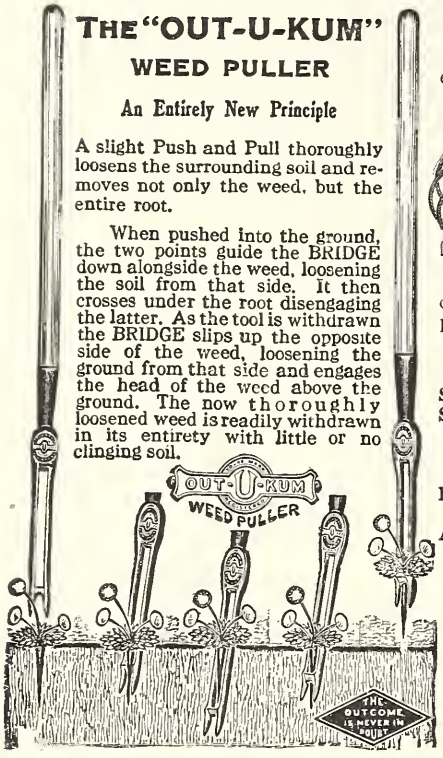
PRICES SUBJECT TO MARKET CHANGES

THE "OUT-U-KUM" WEED PULLER

An Entirely New Principle

A slight Push and Pull thoroughly loosens the surrounding soil and removes not only the weed, but the entire root.

When pushed into the ground, the two points guide the BRIDGE down alongside the weed, loosening the soil from that side. It then crosses under the root disengaging the latter. As the tool is withdrawn the BRIDGE slips up the opposite side of the weed, loosening the ground from that side and engages the head of the weed above the ground. The now thoroughly loosened weed is readily withdrawn in its entirety with little or no clinging soil.

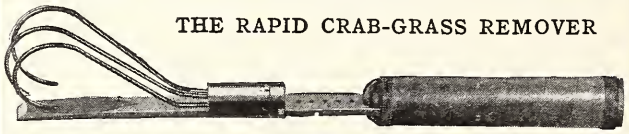


The "Out-U-Kum" Weed Puller

Made of refined malleable iron, highly polished. Black enameled ferrule and select waxed hardwood handle. $1 each.

Stumpwall Weed Extractor for Lawns

THE RAPID CRAB-GRASS REMOVER



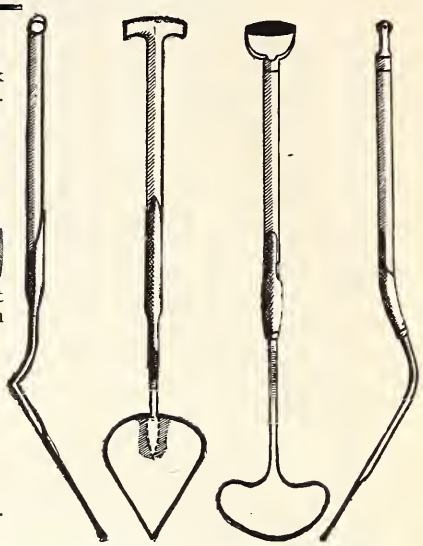
Patent applied for. A 12-inch hand tool designed to extract crab-grass, star-grass, chick-weed, self-heal and plantain from putting greens and fine lawns. $1.50 each, $16.50 per doz.

Magic Weeder Hoes

Style A. 3-prong Weeder. 25 cts. each.
Style D. 4-prong Weeder and Hoe. 60 cts., postpaid.

Sod Lifters

English Pattern. Heart-shaped, strong, and highly efficient. $7 each.
American Pattern. Preferred by many on account of its light weight. $2.25.

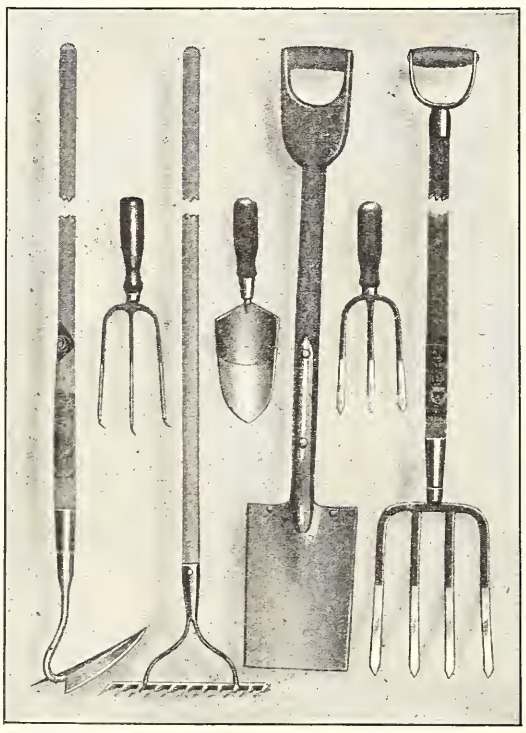


English Sod Lifter
Length 4 ft.

American Sod Lifter
Length 4 ft.

English Digging Forks

Four Tine "D" Handle, $2.75.



S. & W. Co.'s Garden Tool Sets

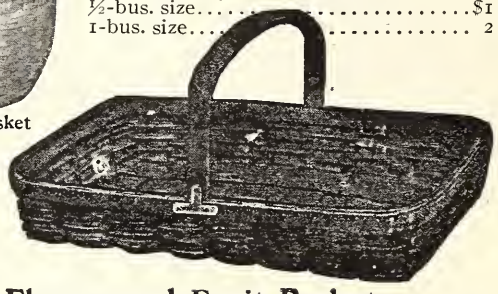
The S. & W. Co.'s Garden Tool Sets are selections of the most useful tools of the size and kind used in the garden. They are light but strong and consist of 1 Spade, 1 Digging Fork, 1 Rake, 1 Hoe, 1 Trowel, 1 Hand Fork, and 1 Hand Weeder. Every tool is of good quality, well made, and will give good service. Price, $6. Ladies' and Children's Set, 1 Shovel, 1 Hoe, 1 Rake, and 1 Spading Fork, $3.

Picking Basket

Picking Basket

A handy basket for picking fruit and gathering eggs, etc. Best oak splint, stiff bail, light and well made. Indispensable on the farm.

½-bus. size.....$1 00
1-bus. size..... 2 00



Flower and Fruit Basket

This basket is made light and especially for gathering cut-flowers, berries, grapes, asparagus, and small vegetables. A handy basket for carrying berry boxes while being filled. Handle has two galvanized braces. Light, strong and handy. Made in 3 sizes.

	Length	Width	Depth	
Small size	18 in.	10 in.	3½ in.	$1 00
Medium size	20 in.	12 in.	3½ in.	1 10
Large size	22 in.	14 in.	3½ in.	1 25

Bamboo Basket

Bamboo Basket

Better known as Long Island Potato Basket. Woven split rattan; handle opening under rim. Well made. A very good basket for potatoes.

½-bus. size.....$1 75
Bus. size..... 2 25

General-Purpose Basket

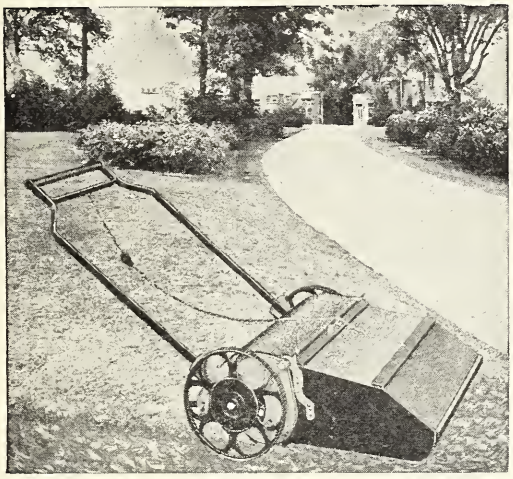
General-Purpose Baskets

Used for many purposes on the farm. Handy for carrying corn, coal, wood, vegetables, leaves and rubbish, etc. Best oak splint, reinforced with iron hoops. Made strong and for long service.

1-bus. size.....$2 00
1½-bus. size..... 2 50
2-bus. size..... 3 00
3-bus. size..... 4 25
4-bus. size..... 5 00

Lawn Cleaners, Golf Sweepers, and Lawn Rollers

PRICES SUBJECT TO MARKET CHANGES



Stumpp & Walter Co.'s Lawn and Golf Sweeper

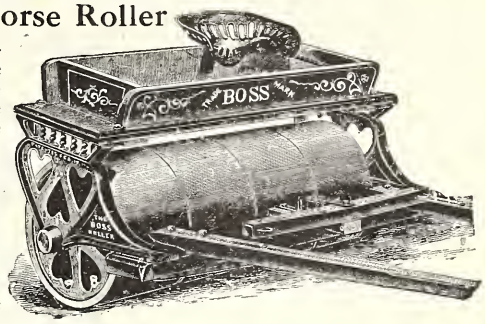
Is equipped with Palmetto Brushes of the toughest fiber and unaffected by water. Sweeps and gathers fresh cut and dead grass, leaves, stones, and other litter. Reduces labor from hours to minutes. Beautifies the grass. A real necessity for the quick and economical sweeping of lawns and golf-courses. Labor saving, efficient, and durable machine. This new sweeper is practically an all year round machine, for wherever there is a plane surface to be swept, whether sidewalk or porch, the S. & W. Co. Lawn and Golf Sweeper will do the work easier and quicker.

Width, 28 inches. Net weight, 84 lbs.; gross weight, 106 lbs. Price $35, Extra Wheels without Rubber Tires $5 each. Brush Reel, 28-inch, complete with brushes $13. Grass-Box, 28-inch size, $10.

Pennsylvania Putting-Greens Lawn-Sweeper

The PENNSYLVANIA Lawn Cleaner and Rake is quickly converted into an efficient sweeper for removing worm casts from putting-greens without injury to the turf and in a tenth of the time consumed by usual methods. The three steel rakes are removed and the brushes substituted. The brushes are made of high-grade fiber, set in a hardwood head, and give long wear. Moisture will not injure the brushes, and owing to the construction of the machine, they are easily removed for cleaning or for interchanging with the raking cylinder. The machine is not taken apart during this operation. 24-inch sweep, $35; 36-inch sweep, $50. Brushes, per set of 3, 24-inch, $8; 36-inch, $10.

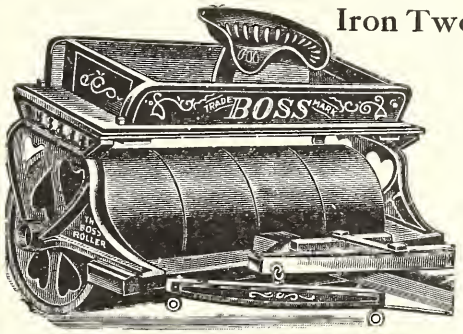
Iron One-Horse Roller



This machine is designed to meet the demand for a one-horse Roller. The construction is the same as the two-horse Roller, except that it has the shaft in place of the pole. Each section is turned smooth on the surface with outer edges beveled. Quality and finish are the same as of the two-horse Roller and also include the weight, box, seat, and shaft. They give long and excellent service.

No.	Diameter	Length	Sections	Weight	Price
60	20 in.	48 in.	4	950 lbs.	$90 00
61	20 in.	60 in.	5	1,150 lbs.	106 00
62	24 in.	48 in.	4	1,200 lbs.	114 00
63	24 in.	60 in.	5	1,450 lbs.	133 50
65	28 in.	48 in.	4	1,350 lbs.	127 50

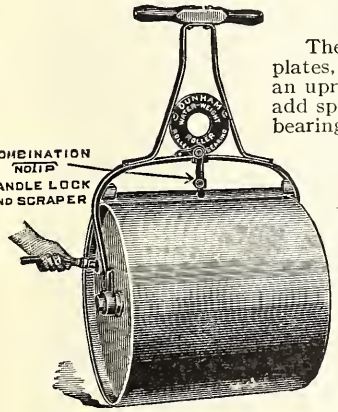
Iron Two-Horse Roller



Suitable for roads, lawns, and golf-courses. This Two-Horse Iron Roller is manufactured to do heavy work. Has been used with excellent success on golf-courses and private estates, on roads, lawns, and putting-greens. This is the best draft Roller on the market. It has babbitt-metal bearings, pulls directly from the axle, and is so perfectly balanced that there is no weight on the team. It is equipped with a substantial weight box for additional weight, seat, and pole. Each section is turned smooth on the surface with outer edges beveled. This Two-Horse Roller is superior in quality, construction, and finish.

No.	Diameter	Length	Sections	Weight	Price
71	20 in.	72 in.	6	1,300 lbs.	$117 00
72	24 in.	60 in.	5	1,450 lbs.	133 50
73	24 in.	72 in.	6	1,700 lbs.	153 00
75	28 in.	60 in.	5	1,650 lbs.	151 50
76	28 in.	72 in.	6	1,950 lbs.	175 50

The Dunham "Water-Weight" Lawn Roller



Filled with Water or Sand

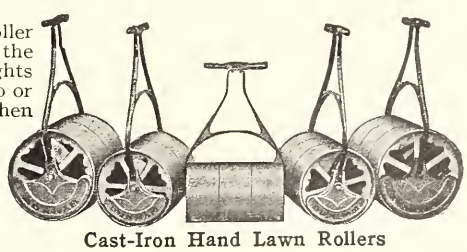
The Dunham Water-Weight Roller is a most satisfactory Roller. The construction consists of three heavy steel plates, pressed together and electric-welded, forming one solid steel drum with no leaky joints; handles are always in an upright position, as shown in the illustration, and held in this position with counterbalance weights, which also add speed and ease of operation to the Roller. Axles are of high-carbon steel, perfectly round, and revolve in roller bearings, the same as used in automobile construction. This feature alone has proved this Roller to operate with 44 per cent less energy or power than is required to operate other Rollers. The proper way to fill this Roller is shown in the illustration. The weight of each Roller empty and filled is given with the diameter and length below.

No.	Diam. in.	Length in.	Sections	Weight empty lbs.	Filled with water lbs.	Price
WB3	14	20	1	60	200	$18 50
WB5	18	24	1	75	300	22 25
WB7	24	24	1	110	500	25 75
WB9	24	32	1	116	575	28 00

Cast-Iron Hand Lawn Rollers

Made in one, two, and three sections. The face of each Roller is made smooth, with outer edges rounded to avoid cutting the lawn or garden. Roller-bearing, outside counter-balancing weights to keep the handles in an upright position. The Rollers of two or more sections are preferable, as they will not injure the grass when turning. The best one-man Rollers are those averaging from 250 lbs. to 500 lbs.

No. Sections	Diam. in.	Length in.	Weight lbs.	Price
1	2	15	150	$14 50
2	3	15	200	20 00
4	2	20	250	25 50
7	2	20	300	29 50
8	3	20	350	$34 50
9	2	24	400	39 50
10	2	24	450	44 00
13	2	28	500	50 00



Cast-Iron Hand Lawn Rollers

For Healthier Trees and Better Fruit

Charles Fremd's Formula and Process

A contact insecticide and fungicide of unusual merit for spraying deciduous fruit and ornamental trees and shrubs and many varieties of Evergreens, Rhododendrons, etc.

For San José, Oyster Shell, Pine Scale and many other scale insects. Young of Aphis, Pear Psylla, Thrips and White Fly, Red Bug, Red Spider and Citrus Rust Mite, Peach Leaf Curl, Brown Rot of Peach and other Stone Fruits, Apple and Pear Scab and many other fungi.

Dilute 1 to 25 for dormant spray and up to 1 to 200 for foliage spray. Effective, economical, clean to use.

Price, qt. 60 cts., gal. $1.75, 5 gals. $7, 10 gals. $12.50, ½-bbl. (30 gals.) $25.50, bbl. (50 gals.) $37.50

Carbon Bisulphide (Ant Destroyer)

Poisonous and explosive. Keep away from all flames and your nose.

For ants in walks, pour a little Bisulphide on each nest; in lawns and gardens, insert the Stumpp & Walter Funnel and Skewer at intervals of 10 inches and pour a tablespoonful of Ant Destroyer in each hole.

For woodchucks saturate a rag with a third of a can of Ant Destroyer and push down hole as far as you can; stop up entrance with dirt, and repeat for every entrance to burrow. Do this as quietly as possible so the chucks will not try to dig in further and thus escape. Price of Carbon Bisulphide 75 cts. per can. Funnel and Skewer for using Carbon Bisulphide $1.50.

Hortex

A Powerful "ALL-IN-ONE" Mixture for Dusting

Our aim in introducing **Hortex** has been to place in the hands of our customers an effective and economical insecticide and fungicide that could be easily and quickly applied to all trees, shrubs, vegetables, and flowers without danger of injury to the foliage but with disastrous results to all insect life on the plant. It is our belief that **Hortex** fills these requirements to a much greater degree than any other insecticide or fungicide.

It is much easier to apply **Hortex** by the effective dusting method than to mix and apply liquid poisons. Dusting fruits and crops has proved so successful in many sections of the country that it has displaced almost entirely the old method of spraying with liquid poisons.

As a fungicide, **Hortex** is used for the control of scab and brown rot on fruit trees, mildew and black rot on grapes and roses, mildew on peas, blight and leaf-spot on fruit trees, tomatoes, celery, and strawberries.

The arsenate of lead in **Hortex** is adapted for the control of chewing insects like the codling moth and leaf-roller on apples, asparagus and potato beetles, caterpillars, currant, cabbage and tomato worms, curculio, and other chewing insects.

Hortex is a powerful nicotine dust containing 2 per cent pure nicotine. This high nicotine content is recommended for the control of red bug, flea beetle, leaf hopper, pear psylla, aphis, thrips, squash bugs and the striped cucumber beetle.

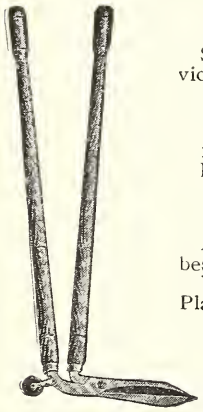
Hortex applied with a Model B Dust Gun makes a successful combination for general garden use. ½-lb. can 25 cts., 1-lb. can 50 cts., 5-lb. can $2, 10-lb. can $3.50.

Model B Dust Gun. The best small hand-duster. $1.25 each.

SPECIAL INTRODUCTORY OFFER. One Model B Dust Gun with one pound can of **Hortex** for $1.75, postpaid.

Dandelion Digger

Used for digging out Dandelions from lawns. Blade, 6 inches, 60 cts. each, $6 per doz.

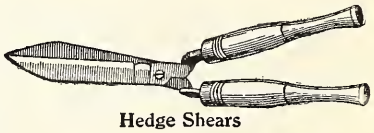


Border Shears

Hedge Shears

Solid steel blade, crucible tool-steel, tempered to hold an edge. Give good service. Shears with notch are the best for cutting heavy stems of hedge plants.

Plain	Price	With Notch	Price	P. P.
8-in. blade	$3 25	8-in. blade	$3 75	4 lbs.
9-in. blade	3 75	9-in. blade	4 25	4 lbs.
10-in. blade	4 00	10-in. blade	4 50	5 lbs.
Ladies'	3 00			

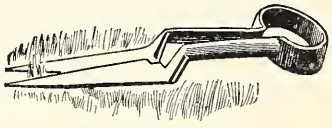


Hedge Shears

S. & W. Co.'s Grass Shears

A very simple but practical locking device holds the Shears together. Made of the best crucible tool-steel; polish finish. One size only, 6½-in. blade, $2.50.

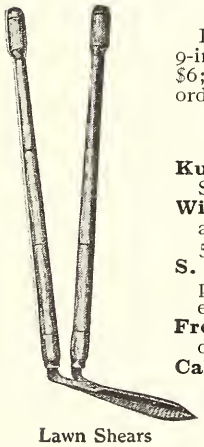
Western Grass Shears. Made of good-quality tool-steel. A one-piece Shears. Plain finish, 6-in. blade, $1.50. A leather shield is furnished with each Shears.



Grass Shears

Grass Edging or Border Shears

Designed to trim the overhanging grass on borders around flower-beds and walks. 9-in. blades of high-grade tool-steel; polished handles and blades. Without wheel, $5.50; with wheel, $6.



Lawn Shears

Lawn Shears

Designed to cut grass under hedges, fences, grape arbors, and flower-beds or shrubs. 9-in. blades of high-grade tool-steel, polished handles, and blades. Without wheel, $6; with wheel, $6.50. *Notice:* When shipping the above Shears, unless stated on orders, we send Shears with wheel.

Pruning Shears

Kunde. This pruning shears can now be obtained from abroad. It is very durable. Solid steel, $4.

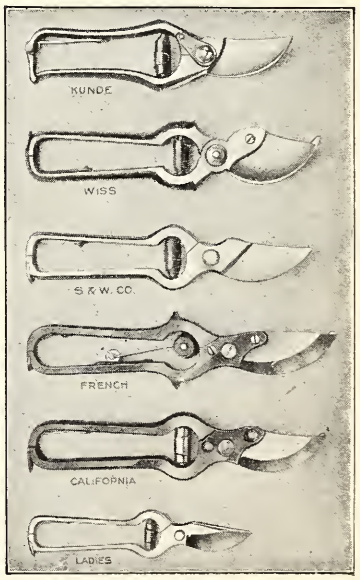
Wiss. Made in America. Crucible tool-steel; blades are detachable; tempered to hold an edge; will not break. Made in two sizes. 9-in. $4; 10-in. $4.50. Extra springs, 50 cts. each; extra blades, $1.10 each.

S. & W. Co.'s Solid Steel. Crucible tool-steel. Blade and handle are one piece of polished steel; a ratchet nut keeps the Shears properly tightened; will not break; excellent finish. Made in three sizes. 8-in. $2.50, 9-in. $2.75, 10-in. $3.

French. Made of good-quality tool-steel; flat roller spring; works easily and cuts well; detachable blades; plain finish. Made in two sizes. 8-in. $2, 9-in. $2.50.

California. Crucible tool-steel blade; malleable handle; Japan finish. A very good Shears for grape-vines and shrubbery. $1.

Ladies' Nickel-plated. Light, practical, handy to use on roses and shrubbery. 6-in. $1.75.



Pruning Tools and Orchard Supplies

PRICES SUBJECT TO MARKET CHANGES

Compound-Lever Pruner

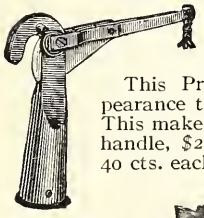
Compound-Lever Pruner

Working parts, being made from forgings, are very strong, without being unnecessarily heavy, and the strength, durability, easy cutting qualities of this tool appeal to all who have occasion to use a strong and powerful Pruner. 10 ft., $4.50; 12 ft., $4.60; 14 ft., $4.70; 16 ft., $4.80.

Waters Tree Pruner

This Pruner has been before the public for over twenty-five years. It has numerous well-known advantages, and if a tool for ordinary pruning is required, the Waters will give entire satisfaction.

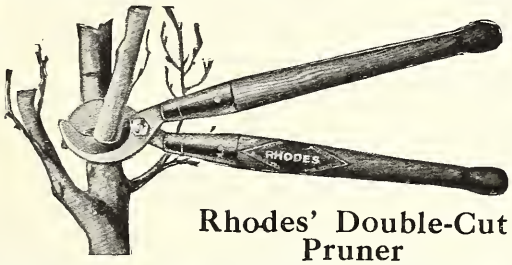
6-ft.	$2 00	12-ft.	$2 75
8-ft.	2 25	Extra Knives.	
10-ft.	2 50		



Telegraph Pole Pruner

Telegraph Pole Pruner

This Pruner is similar in appearance to but of heavier construction than the Waters. This makes it very strong and durable. Plain, $1.75; with handle, $2.00. Extra knives, 40 cts. each; extra springs, 40 cts. each.



Rhodes' Double-Cut Pruner

A good and powerful Pruner. Cuts from both sides of the limb, and does not bruise the bark. Long ferrules; handles do not pull out; blades are of the best forged steel. 30-inch, $5; 36-inch, $5.25.

PRUNING SAWS

Paragon Pruning Saw

Paragon Pruning Saw. A very good double-edge Pruning Saw, with the draw cutting and thrust cutting edges. Will cut large limbs better than the lighter Saws. 18-inch, $1.75; 20-inch, $2.

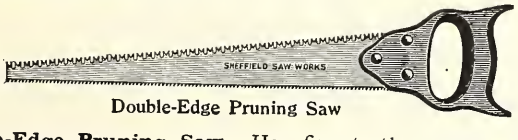
No. 4 Pruning Saw. Without this Saw no pruning outfit is complete. The tapering blade permits of its use in close places. Used for other purposes. A very useful Saw. 20-in., $1.75.

No. 4 Pruning Saw

Two-Man Crosscut Saw. Has Tuttle (Lightning) teeth; cuts easily and rapidly; thin back, will not bind. 4½-ft., $4.50; 5-ft., $4.75; 5½-ft., $5.

Buck Saw. Quality kind. $1.75.

Saw-Buck. Quality kind. $1.



Double-Edge Pruning Saw

Double-Edge Pruning Saw. Has fine teeth on one edge and "Lightning" teeth on the other. 16-in., $1.25; 18-in., $1.50; 20-in., $1.75; 22-in., $2.

PRUNING SAWS, continued

One-Man Crosscut Saw. Can be used also as a Two-Man Saw. Has "Lightning" teeth; cuts easily and rapidly.

3½-ft.	$4 10	4½-ft.	$5 25
4-ft.	4 75	5-ft.	6 00

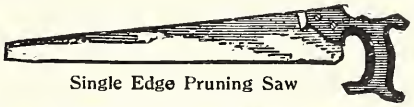
Orchard Pruning Hook and Saw. Better adapted for pruning or sawing smaller branches than the Little Giant. Without pole, $3.

Little Giant Pruner and Saw

Little Giant Pruner and Saw Combined. The knife operates with a cord; a spring throws the knife back. Saw can be removed when desired; attaches to pole of any length. Without pole, $3.

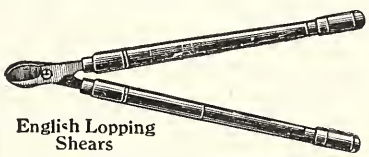
Combined Pruning Saw and Chisel

Combined Pruning Saw and Chisel. A handy tool; attaches to pole of any length. With a thrust the chisel cuts off small branches. The saw is for larger limbs. Without pole, $2.25.



Single Edge Pruning Saw

Single-Edge Pruning Saw. Best spring-steel. 18 in., $1.50; 20 in., $1.75.

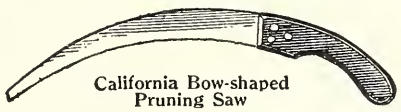


English Lopping Shears

English Lopping Shears. The Shears are well known, and do good service.

No. 2. 24-in... $4 00
No. 3. 28-in... 5 00
No. 4. 32-in... 6 00

Rhodes' Pole Pruning Saw. Attached to a light, 10-foot pole. Is adjustable to any angle. The Saw is a Paragon blade, made of the best spring-steel; has a draw and thrust cutting edge; saves a lot of climbing and risk of falling. $4.



California Bow-shaped Pruning Saw

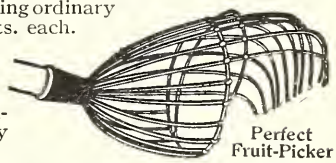
California Bow-shaped Pruning Saw. Excellent to use wherever two limbs are close together. Can be used in the forks without bruising the bark of other limbs. 12-in., $1; 14-in., $1.15.

Rhodes' Pole Pruning Saw

Swivel Pruning Saw. Very handy to use where the limbs are close together. The blade is adjustable to cut from any angle; it saves the trouble so often found when using ordinary Saws. $2.50. Extra blades, 50 cts. each.

Perfect Fruit-Picker

Made of steel wire, heavily galvanized; can be attached to any pole. 60 cts. each.



Perfect Fruit-Picker

Asbestos Torch

Attach the Torch to the end of a pole; saturate with kerosene oil, light and hold under the caterpillars' nests, and pass quickly along the branches and around the trunk of the tree. The heat instantly destroys the insects and will in no way injure the trees. Without pole, 60 cts.

Asbestos Torch

Challenge Step-Ladder

Strongest and best Ladder manufactured. Made of ash; fine finish. Each step is braced and bolted. Only safe ladder to use 10 feet or over.

	Each
5-ft.	$7 50
6-ft.	8 75
7-ft.	10 25
8-ft.	12 00
10-ft.	13 00
12-ft.	24 00
14-ft.	28 00

PRICES SUBJECT TO MARKET CHANGES

The Stumpp & Walter Co. Ball-Bearing Lawn Mower

ALWAYS READY, EASY-RUNNING, NOISELESS, SELF-SHARPENING, PERFECT ADJUSTMENTS. WILL CUT GRASS 6 INCHES HIGH

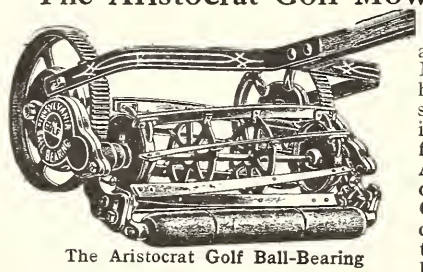
The Stumpp & Walter Co. Ball-Bearing Lawn Mower is universally a family Mower. Most anybody—man, woman or child—can use it with little exertion. It is a high-grade standard machine, adopting only the best features in its construction. The cutting parts are made of oil-hardened crucible tool-steel, The knives and blade will hold a durable edge and will not dull as the softer cutting parts of other Mowers do. The lawn is shaved smooth and even and without some corrugations. The simple adjustment sets the machine to shave the lawn to ½inch or up to 1½ inches as may be desired. See the illustration which is a photograph of actual results. The expense of mowing a lawn is reduced to a minimum with the S. & W. Co. Lawn Mower. The durability of this Mower is unquestionable. It does not have to go to the repair shop each season as do frequently the lower-priced Lawn Mowers.

The construction of this Lawn Mower has overcome the bobbing up and down and gouging that is common to some hand Mowers. The axle revolves in extra-large balls placed in hardened tool-steel cones and cups, and is driven with three gears on each side, by two 10-inch traction wheels. These wheels are made durable and are not easily broken.

This Lawn Mower is made to give good and long service, and with ordinary good care will last years. We take the liberty to recommend the S. & W. Co. Ball-Bearing Lawn Mower to be the best all-round Lawn Mower of its type manufactured. We guarantee it to give entire satisfaction. We supply this Lawn Mower in four sizes.

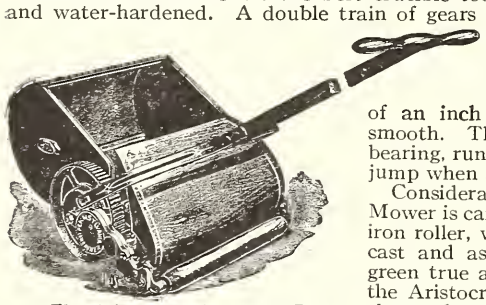
Size	Gross weight	Net weight	Price	Grass Catcher
14-inch cut	65 lbs.	40 lbs.	$16 50	$4 75
16-inch cut	67 lbs.	42 lbs.	18 00	4 75
18-inch cut	71 lbs.	45 lbs.	20 00	5 25
20-inch cut	76 lbs.	48 lbs.	22 00	6 00

The Aristocrat Golf Mower, Ball-Bearing



The Aristocrat Golf Ball-Bearing

The Aristocrat is the acme of putting-green Mowers. Extreme tests have proved this machine superior to all other Mowers in keeping the greens in first-class condition. The Aristocrat was specially designed for putting-greens. Consideration was exercised in the construction of this machine to give the longest service, ease of adjustment and operation, and the best possible satisfaction that can be obtained from a Golf Mower. The life of this Mower is long compared with the other styles of Golf Mowers. The seven revolving blades and the bottom knife are the best crucible tool-steel, oil-tempered and water-hardened. A double train of gears drives the revolving blades from two 9½-inch traction wheels. The greens are shaved to $\frac{1}{16}$ of an inch and left even and smooth. The Aristocrat is ball-bearing, runs easily, and does not jump when starting.



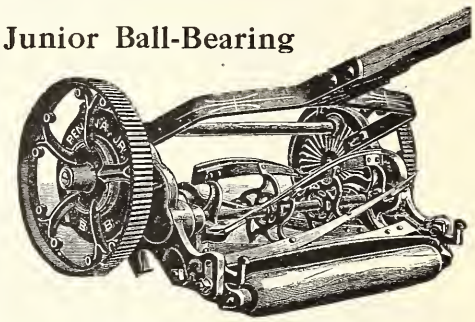
The Aristocrat with Grass Box Attached

Considerable weight of the Mower is carried by the sectional iron roller, which rolls the worm cast and assists in keeping the green true and even. Wherever the Aristocrat has been given a thorough test, it has been accepted and given the preference. The illustration with the Grass Box attached shows the Aristocrat complete, and the way it should be operated to obtain the best results.

The Aristocrat is used exclusively and highly recommended by many of the best golf, tennis and cricket clubs.

Size	Gross weight	Net weight	Price	Grass Box
17-inch cut	102 lbs.	72 lbs.	$36 00	$8 00
19-inch cut	104 lbs.	76 lbs.	40 50	8 00

Pennsylvania Junior Ball-Bearing



Pennsylvania Junior Ball-Bearing

The perfection of Lawn Mowers. The Pennsylvania Junior has all the good features incorporated in a perfect Lawn Mower. The five revolving blades are driven by a triple set of gears and a 10-inch traction wheel from each side. The revolving blades and the bottom knife are the best crucible tool-steel, oil-tempered and water-hardened. The Pennsylvania Junior is capable of cutting grass 6 inches high. Will not jump, as many of the lower-priced machines do.

Size	Gross weight	Net weight	Price	Grass Catcher
15-inch cut	71 lbs.	48 lbs.	$28 00	$4 75
17-inch cut	74 lbs.	51 lbs.	31 50	4 75
19-inch cut	77 lbs.	53 lbs.	35 50	5 25
21-inch cut	80 lbs.	55 lbs.	39 50	6 00

Pennsylvania Golf Mower

Low wheel, plain bearings, for home greens

This Mower is especially adapted for small golf links, tennis courts, bowling greens, and cricket creases. Can be adjusted to cut $\frac{1}{16}$ of an inch, practically shaving the lawn. **Size, 16-inch; gross weight 67 pounds; net weight 37 pounds; price, $25; grass box $8.**

Townsend Flyer Mower

The best low-priced Mower made with ball-bearings. Four revolving blades, flexible bottom knife, self-sharpening. Made of best materials. A very easy-running and light Mower for ladies and children to operate.

Size	Price	Grass Catcher
14-inch cut	$11 50	No. 1 $3 00
16-inch cut	12 50	No. 2 3 25
18-inch cut	13 75	No. 2 3 50

The Four-Acre Power Lawn Mower

THE PINNACLE OF PERFECTION IN POWER MOWERS

THE FOUR-ACRE MOWER is a powerful grass cutter, sturdy as a tractor—the handiest and most economical Power Mower on the market. Strength is not sacrificed to lightness, nor durability to price. It is built to meet a definite need in a most satisfactory way. There are many special features about this Mower that make it easier and handier to operate. Performance is the standard by which Power Mowers are judged, and in this respect the Four-Acre is in a class of its own.

THE MOTOR is specially designed, air-cooled, forced-draft, throttle control, easy starting, powerful and reliable.

INDEPENDENT CONTROL of power on cutting unit and traction allows it to travel over stony roadways, up and down curbings, etc., without revolving cutting unit. In case any sticks or stones become caught in the cutter blades, the reel clutch will slip leaving knives uninjured. The knives may be sharpened by the Mower's own power. Simply put grinding compound on stationary blade and reverse the motion of knives.

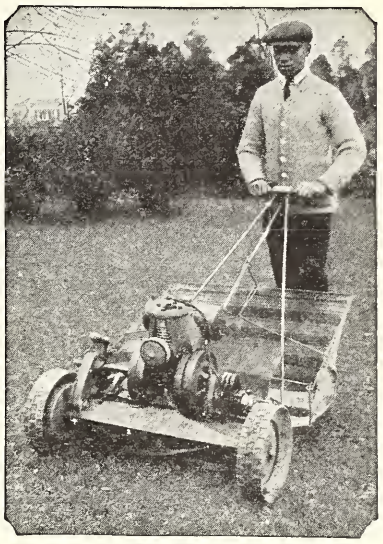
DIFFERENTIAL IN WHEEL gives power on both wheels, yet allows easy steering for turning in and out of flower-beds, bushes, paths, etc. The Four-Acre will cut on a 35-degree incline.

GEAR DRIVE is enclosed. Transmission and clutches run in bath of oil—entirely dirt-, dust-, and fool-proof.

GUARANTEED to do more and better work at less cost, and to outlast any other walking Power Mower built.

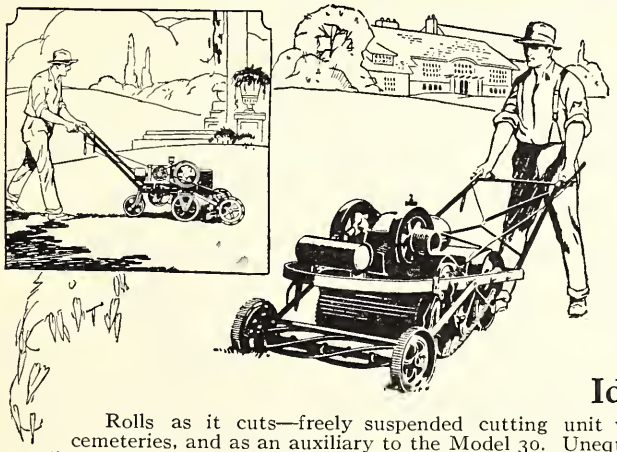
Price $275, f. o. b. New York. Grass Box, $5 extra

Write for complete catalogue describing the Four-Acre Mower



Brief Specifications

MOTOR: 2½-inch bore by 2½-inch stroke.
SPEED OF MOTOR: 1,000 R. P. M. at 3½ miles per hour of Mower travel.
FUEL CONSUMPTION: About one gallon a day.
WIDTH OF CUT: 24 inches. Capacity 4 to 5 acres a day.
TRANSMISSION: Cut gears. Cone type clutches, giving separate control of power on cutting reel and traction wheels. Throttle and traction clutch control on handle grip.
FINISH: 2 coats battleship grey enamel—1 coat color varnish. Weight, uncrated, 200 pounds. Shipping weight, 250 pounds.



Ideal Power Lawn Mowers

Satisfactorily meet every grass-cutting requirement

They have been designed by mower experts—and all are built complete, from cutters to motors, in our own factories. Every unusual condition which might be encountered is fully provided for in the design of Ideal Mowers. All models work efficiently over irregular surfaces, through tough, coarse grass, and over hilly grounds.

Model 30 THE ALL-PURPOSE MOWER

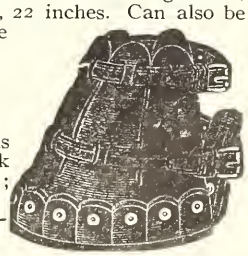
This is the most widely used model, because it is adaptable to the widest range of uses. The heavy traction roller smooths out the lawns as it cuts. Loosely suspended cutting unit tilts to cut over irregular ground, and convenient lever lifts cutting unit entirely off the ground for crossing walks, drives, etc. An all-purpose Mower that is simple, easy to operate, and cuts close up to trees, shrubbery, and flower-beds. 30-inch cut. **Price $385, f.o.b. New York.**

Ideal Junior

Rolls as it cuts—freely suspended cutting unit which is raised or lowered at will. Especially valuable on small grounds, cemeteries, and as an auxiliary to the Model 30. Unequaled for trimming in close quarters. Width of cut, 22 inches. Can also be supplied with an interchangeable, high-speed cutting unit which the ground-keepers on many country clubs state gives splendid results on the putting-greens. **Price $260, f.o.b. New York.**

Leather Horse Boots, Quality Kind

Easily attached to the horse's feet; prevent marring the lawns. Frequently after rains, or in the spring, the lawns are soft and easily cut up. Use a good leather boot and save the lawn. Quality Kind are made good. Double-thick soles and uppers reinforced; heavy parts put together with copper rivets. Small size, $14; medium size, $15; large size, $16.



Rubber Hose, Menders, Nozzles, and Power Sprayer

PRICES SUBJECT TO MARKET CHANGES

RUBBER HOSE

S. & W. Co.'s Special Brand (Wayahead). Surpasses all the cheaper grades of Hose. Its durability is not excelled by much of the higher-priced Hose. It is three-ply, seamless, and non-kinkable. Standard lengths, ¾-inch bore. 25 ft., $4.50; 50 ft., $8.50.

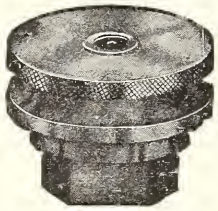
Electric. Three-ply, non-kinkable, molded Hose. The strength and durability of this Hose place it with the very best grade of Hose manufactured.
Standard lengths, ¾-inch bore, 25 ft., $6.25, 50 ft., $12.
Standard lengths, ½-inch bore, 25 ft., $5.75, 50 ft., $10.50.
Other lengths, ¾-inch bore, cut and coupled, 24 cts. per ft.
Other lengths, ½-inch bore, cut and coupled, 21 cts. per ft.

Golf-Course. Six-ply, heavy duck Hose, with exceptionally strong black tube and white cover. Especially adapted for use on golf-courses, tennis-courts, and cricket-creases. This is guaranteed for any pressure and hard work as usually found on golf-courses and private estates. Will stand up and give satisfaction under conditions where ordinary garden Hose has failed. Standard lengths, ¾-inch bore, 25 ft. $6; 50 ft. $11.50. Standard lengths, 1-inch bore, 25 ft. $10.50; 50 ft. $20.

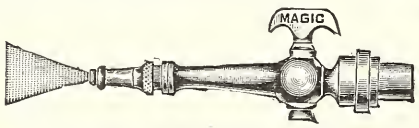
HOSE NOZZLES

Stott's. A Nozzle that has become a favorite among rose-growers, etc., for exterminating red spider. Splendid Nozzle for reaching under the foliage; gives a very fine, misty spray Single, $1.50, double, $3.

Mistry Jr. Can be used for spraying white-wash. $1.75 each.

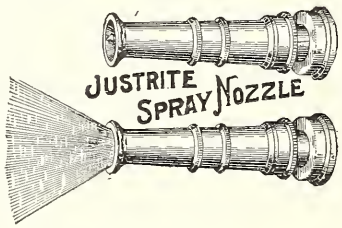


Mistry Jr. Nozzle



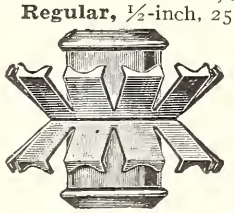
Magic. Brass Hose Nozzle, ¾-inch. Has a shut-off, a stream, and a rose spray. Without rose, $1.20.

Justrite Spray. A very popular adjustable Nozzle. It gives a copious spray or a well-defined full stream. Has a positive shut-off, by turning the barrel of the nozzle. 90 cts.



Bordeaux Spray Nozzle. A good nozzle for whitewash and all heavy spray materials. $1.50.

HOSE COUPLINGS, Evanston. ¾-inch, 50 cts. each.
Regular, ½-inch, 25 cts.; ¾-inch, 30 cts. each.



Perfect Clinch Mender

HOSE MENDERS

Cooper's Brass. ½- and ¾-inch, 12 cts. each, $1.20 per doz.; 1-in., 15 cts. each, $1.70 per doz.
Perfect Clincher. ½- or ¾-inch, 15 cts. each, $1.50 per doz.
Hudson. ½- or ¾-inch; state size. Box of 6 tubes and 20 bands, with pliers, $1.

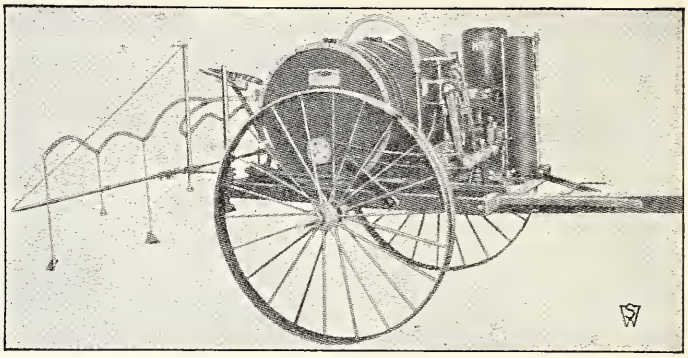
Sykes Hose Holder

A simple and inexpensive device for holding the hose. With this the nozzle can be placed at almost any angle. 35 cts.

Siamese Attachment

This brass hose attachment is an excellent arrangement for operating two or more lawn sprinklers at one time. Can be attached to hose and sprinklers very easily. ¾-inch, $1.25 each.

POWER SPRAYER



Bean Power Sprayer. Outfit 600

This outfit designed for very efficient work in the truck-garden, may be easily and quickly converted into an orchard sprayer, or it may as readily be used to whitewash or to apply disinfectants. It is a universal Sprayer, and will be found very serviceable in spraying in the alfalfa or cantaloupe field. It carries our single cylinder pump with the pressure regulator built in.

Specifications.—The pump has a 2¾-inch cylinder, porcelain lined; 4⅛-inch stroke, 50 R.P.M. capacity 4¾ gallons per minute. Weight, with truck, 700 pounds; height, 44 inches from ground to top of tank; length 6 feet 6 inches. Adjustment of wheels, 50 to 72 inches.

Makeup of Bean Truck Sprayer.—Outfit 600, Simplicity engine 1½ H.P., magneto ignition; Bean simplicity double-back geared power pump with gauge; pressure regulator is built into pump; 100-gallon tank fitted with handhole, cover and drain; complete rotary agitator fitted in tank and connected to pump; steel platform with all parts connected up and securely fastened in position; special truck; two 36-inch wheels; 4-inch tires; extra-long axle; fitted with shafts; adjustable attachment with four nozzles completely fitted; extra packings; valve seats, gaskets, wrenches. This outfit will be shipped thoroughly tested and ready for use.

The above complete with 1½ H.P. Simplicity Engine $260, f.o.b. Lansing, Mich.

Bamboo Spray Pole

SPRAY POLE FOR TALL-TREE SPRAYING

Bamboo Spray Pole

Bamboo Spray Poles are brass-lined to resist the corroding effect caused by strong solutions. Each Spray Pole is equipped with a drip-shield at the top and brass shut-off at the bottom. Spray Poles over 12 feet are not entirely satisfactory, and we do not recommend them 8 ft. $4.20, 9 ft. $4.40, 10 ft. $4.60, 12 ft. $5.30.

Abol Syringe

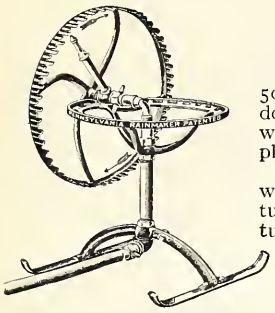
The most economical and efficient of Hand Sprayers. Embodies all the good features that are desired. The new, improved nozzle has three caps—fine, medium, and coarse. The fluid is divided by two whirling streams which come into violent contact just before leaving the cap and scatter into tiny particles, which do not fall to the ground on being discharged, but hang in the air and envelop the tree or bush. A bend is furnished to spray the under foliage. $10.50. Shipping weight, 4 lbs.

Full description of BARREL and HAND SPRAYERS, page 170

If you are interested in establishing good Golf Turf our publication on this subject will interest you. Please write for a copy.

LAWN SPRINKLERS

PRICES SUBJECT TO MARKET CHANGES

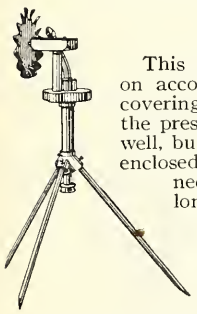


Rainmaker

This Sprinkler waters an area of 300 to 500 square yards with drops of spray; doesn't flood; swamp at the center; doesn't wash out soil; doesn't chill tender grass or plants; and works without attention.

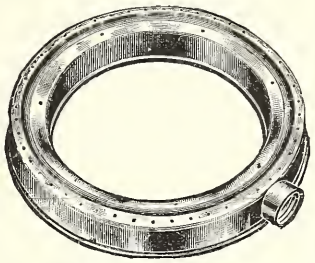
It is made on the turbine principle. The water coming from the nozzle strikes the turbine paddles, turning the wheel. As the turbine wheel revolves it travels around the circular base, carrying the jet around approximately eight times a minute. It distributes the water evenly over the entire area so gradually that it allows it to sink into the ground and not run off into low places.

The Rainmaker can be easily regulated to throw heavy or medium drops, or fine spray. With a pressure of 40 to 60 pounds it will distribute this evenly from the center to the extreme edge of a circular area 60 to 75 feet in diameter. Most of the spray travels through the air much further than is true of all other Sprinklers. That gives it time to lose the chill so harmful to plants. $25 each; 3 for $23.75 each.



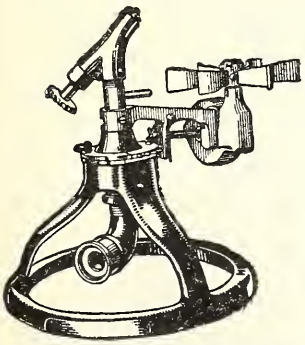
Double Rotary Sprinkler

This Sprinkler has many friends among greenkeepers on account of the efficient manner in which it sprays, covering a circle up to 50 feet in diameter in cases where the pressure is good. On low-pressure lines, too, it works well, but the area covered is much smaller. The gears are enclosed and run in oil; they are so simple that it is rarely necessary to make any adjustments even after very long wear. $12.50 each.



Ring Lawn Sprinkler

The S. & W. Co.'s Ring Sprinkler is not to be compared with the cheaper Ring Sprinklers. It is made of brass, firmly constructed, and guaranteed to stand the water-pressure of any municipal water-works in the United States. 90 cts.

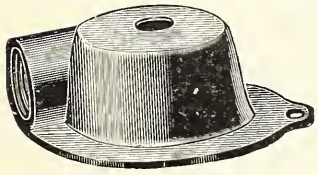


The Dayton Rotary and Oscillating Sprinkler

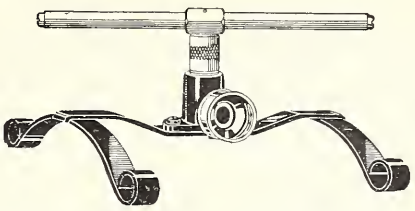
The Dayton is the most practical, durable, efficient Sprinkler devised for watering putting-greens and is now being used by thousands of lovers of a beautiful lawn or garden. It sprinkles in a circle. It sprinkles in a half-circle. It sprinkles from a 3-foot radius to a 40-foot radius. It sprinkles every inch of ground. It is better for your lawn or plants than sprinkling with a hose. It operates on any pressure from 15 pounds up. The nozzle can be adjusted to any kind of a stream. It pays for itself in water saved and convenience. It is made of the best brass, aluminum, and German silver. $8.

The C. B. G. Sprinkler

Cheap but Good

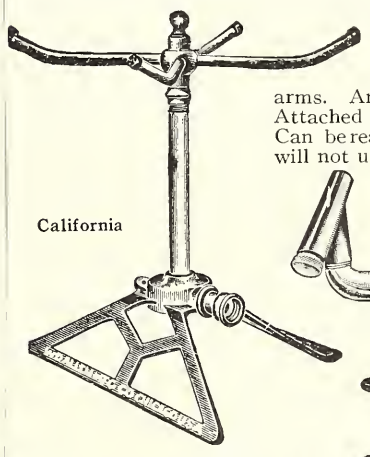


Is made on the well-known principle of the tangential spray. Nothing to get out of order. Will last a lifetime. It is easily drawn about the lawn without shutting off the water. 60 cts. each, $6 per doz.



Rainbow Revolving Sprinkler

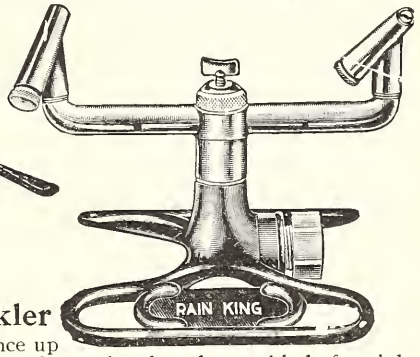
The ideal Sprinkler for a low water pressure. Operates on a hard fiber washer which absorbs 20 per cent of water, furnishing a leak-proof and frictionless joint. This efficient little apparatus has proven through actual tests to deliver the maximum amount of spray on a low pressure; no wear and tear. Will water a circle of 40 to 50 feet in diameter. Price, $3.



California

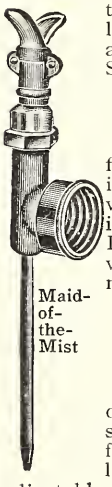
California Lawn Sprinkler

Is made with three and four arms. Arms and head are polished brass. Attached to a sled base, 10 inches square. Can be readily drawn about the lawn and will not upset. With 4 arms, $2.50.



Rain King Sprinkler

Throws spray any distance up to 80 feet. Instantly regulated to do any kind of sprinkling required. You can sprinkle your flower-bed and lawn at the same time, with heavy stream or coarse spray. Sprinkles in opposite directions or at right angles. $3.50.



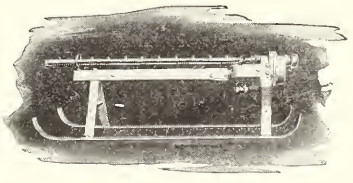
Maid-of-the-Mist

Maid-of-the-Mist Sprinkler

An effective device for sprinkling lawns, gardens, or flower-beds. The water flows with unimpeded force, and is divided and deflected by the two lips of the swivel piece, which it causes to revolve rapidly, scattering the water in fine drops and evenly over a circular area of 25 feet. It works more satisfactorily with a very low pressure of water than any Sprinkler we know of. With spur, $1.25, mailed 10 cts. extra. With sled (recommended) $1.75.

Waterfan

The New Campbell Automatic Oscillating Irrigation Sprinkler Model Nos. 5 and 10



Waterfan will quickly and thoroughly soak any area up to 12 feet wide and 60 feet long. It is instantly adjustable without tools. The distributing devices will not clog like the devices that depend upon small perforations either stationary or revolving. It throws a generous, gentle, mist-like spray which cannot wash or pack the soil or injure the most delicate seedlings. The plane of the spray oscillates back and forth, forming no puddles, but wetting the soil deeply without waste of a single drop of water.

Model No. 5, length 21 inches, waters a rectangular area up to 12 x 60 feet. $12.

Model No. 10, length 5 feet, waters a rectangular area up to 20 x 60 feet. $15.

Sprayers for Applying Insecticides and Fungicides

PRICES SUBJECT TO MARKET CHANGES

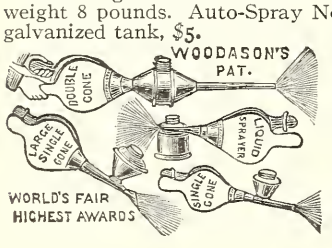
AUTO-SPRAY

Convenient, durable, efficient. Our patented leader of spray apparatus for small uses. Will do better work and do it more easily than any other similar article. Useful with bordeaux and all solutions, also in appying cold-water paint or whitewash. Holds four gallons. Illustration shows our new "Auto-Pop" attachment which doubles the efficiency by saving half the solution and labor. Our "Anti-Choke" Nozzle, cleaned at every operation of "Auto-Pop," can never clog. Tank made of galvanized steel or brass. High-grade hose. Castings for handle, etc., all malleable. No continuous pumping as in the case of the Knapsack Sprayer, nor continuous pumping or slopping as in the case of the bucket pump. A few strokes of plunger compresses enough air to cover a quarter acre of potatoes or similar crop. The operator simply holds the nozzle. Also used for spraying disinfectants. A practical machine for potatoes, tobacco, small-fruits, vineyards, poultry-houses, greenhouses, etc. Extension pipes useful for spraying tall trees. Detailed descriptive circular on request.

Auto-Spray No. 1B. Brass Tank, with "Auto-Pop"..$9 00
Auto-Spray No. 1D. Galvanized Tank, with "Auto-Pop"..... 6 00
Two-row Attachments for spraying two rows at one passing... 1 50
2-foot Brass Extension Pipe..... 60
2-foot Galvanized Extension Pipe..... 50
Brass Elbows for spraying under vines..... 35
Torch..... 1 50
Brass Strainer for straining solution..... 1 20
Auto-Spray Nozzle..... 60

AUTO SPRAY NO. 12

A very convenient size compressed-air Sprayer of new design. For spraying small garden plots, small trees, potatoes, and other low-growing vegetation. Capacity one and one-half gallons, half the capacity of our larger machines. It has a new carry-idea that makes it possible to carry and operate the machine with one hand, leaving the other hand free to hold back the foliage, enabling the operator to spray the underside of the leaves properly. The nozzle extension is made of brass and so arranged that it can be turned to spray up or down at the will of the operator. Pressure is pumped up before the sprayer is put in operation. All the operator has to do after pumping is to press the lever with his finger and direct the spray. The pump is solid brass, of our latest type, and of ample size for tank. Made in both brass and galvanized tanks. Height over all 19 inches. Shipping weight 8 pounds. Auto-Spray No. 12-B, all brass, $7.50; No. 12-D, galvanized tank, $5.



Bellows, Woodason's

Powder, small size.....$2 75
" large size..... 4 25
Liquid, small size..... 3 75
" large size..... 4 25

Double-Cone Powder Bellows. For dusting plant with dry powders for insects and fungus. $6.25.

S. & W. CO.'S "FRUITALL" SPRAY PUMP

The "Fruitall" illustrated herewith has been designed especially to meet the demand for a low-priced Sprayer combining the necessary durability, efficiency, and strength.

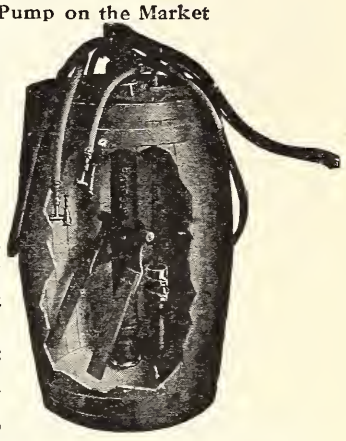
Outfit C. Sprayer with agitator and one lead of 15 feet ½-inch discharge hose, with "Mistry Jr." spray nozzle. Price, without barrel, $20.

Outfit D. Sprayer with agitator and two leads, 15 feet each, ½-inch discharge hose, with "Mistry Jr." spray nozzles. Price, without barrel, $25.

We supply barrel, and mount sprayer on it, for $9 extra, but the barrel is not furnished unless specially ordered.

POMONA SPRAY PUMP

The Best Barrel Spray Pump on the Market



It is of large capacity and powerful, with long adjustable leverage, so that it is easily operated by one person, when necessary, but is especially built for spraying from two leads of hose. The unusually large steel air-chamber gives sufficient pressure for a continuous and regular spray. All working parts are of brass, including plunger and valves, which are easily accessible; it has a paddle agitator. The bulk of the pump goes within the barrel, it is not top-heavy, and does not catch low branches.

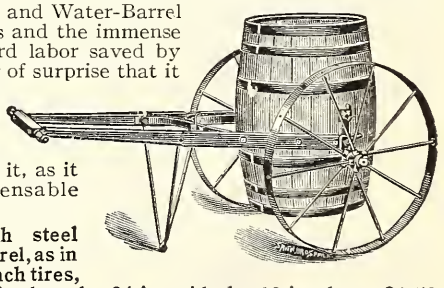
Pomona Outfit A. Sprayer with agitator and one lead of 15 feet of ⅜-inch spray hose, with Mistry Jr. Spray Nozzle.
With barrel.....$38 50

Pomona Outfit B. Same as the above, except with two leads of hose and two nozzles. (See cut.)
With barrel.....$45 00
Extra trunnions for barrel, $2 per set.
S. & W. Co.'s Truck is recommended to save time and labor.

RUBBER SPRAY HOSE

High-pressure, ½-inch bore, nine-ply Hose is best. 30 cts. per foot. Low pressure, ½-inch bore, seven-ply, 20 cts. per foot. Couplings and clamps, 25 cts. extra.

S. & W. CO.'S TRUCK, LEAF-RACK AND WATER-BARREL COMBINATION



When we consider the almost innumerable uses to which our combined Truck, Leaf-Rack, and Water-Barrel can be put, its handiness and the immense amount of time and hard labor saved by its use, it is not a matter of surprise that it is steadily growing in popular favor. It is one of those articles that causes the user to wonder how he ever did without it, as it really becomes indispensable when once used.

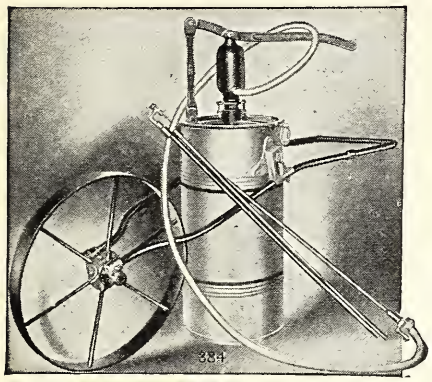
Prices: Truck, 3-inch steel wheel, $20; truck and barrel, as in cut, with steel wheels, 3-inch tires, $25; handy cart box, 38 in. long by 24 in. wide by 10 in. deep, $8.50 extra; leaf-rack, 42 in. long by 28 in. wide by 21 in. deep, $8 extra; complete with truck, with steel wheels, 3-inch tread, water barrel, handy cart box, and leaf-rack, $41. Sprinkler attachment, can easily be adjusted to barrel, extra, $10.

Sprayers for Applying Insecticides and Fungicides

PRICES SUBJECT TO MARKET CHANGES

Auto Spray No. 40 Hand Lever Pump

COMPLETE OUTFIT



The demand for this portable Sprayer is rapidly increasing. The efficiency of this general-purpose Sprayer is finding favor among hundreds of gardeners, florists, and poultrymen.

Uses.—For handling whitewash, cold-water paint, insecticides, fungicides, and all solutions in the garden, greenhouse, or poultry plant.

Tank.— Heavy galvanized steel.

Capacity.—12 gals.

Pump. —Plunger style. Graphite packing, adjustable from the outside by tightening two bolts. No leather cup.

Plunger.—Brass; 1½ inches in diameter; 3 to 4½-inch stroke as desired. The plunger is hollow with a valve at the bottom and this, operating in connection with the air-chamber, ensures a greater reserve capacity than usual in this size of machine.

Valves.—Brass-ball valves; suction pipe fitted with brass strainer.

Agitation.—Mechanical and effective; operated from the handle. The top casting on the tank has broad flange, which prevents the solution from slopping over.

Equipment.—8-foot-high pressure; ⅜-inch hose; 8-foot iron extension; lever shut-off; and latest Vermorel Nozzle, or Non-Clog, Jr., as specified.

Repair list, with formula for mixing whitewash and cold-water paint, with each machine.

Galvanized tank, capacity 12 gallons, with truck, 20-inch wheel. Shipping weight, with truck, crated, 75 lbs. (net 58 lbs.) $30.

S. & W. Bucket Spray Pump

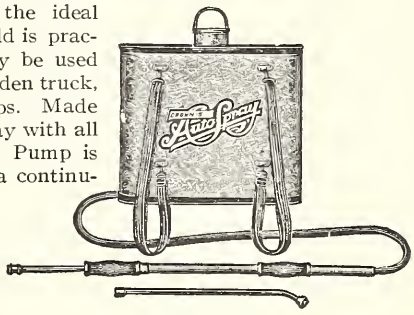
The S. & W. Spray Pump is a saving in the cost of small hand Sprayers. It is a quality Sprayer. This Pump is made of heavy seamless brass tubing, with a large brass air-chamber; it has brass ball valves; is double-acting and will produce a continuous spray or stream. A bordeaux nozzle, with 3 feet of ½-inch spray hose is furnished. The nozzle can be regulated to throw a very fine, medium, or coarse spray. We recommend this Sprayer as the best cheap hand Sprayer for applying whitewash, cold-water paint and disinfectants. When ordering Sprayer to be sent by parcel post, allow for 10 lbs., the packed weight of Sprayer. $7.00.

Extra ½-inch hose, seven-ply, of good quality, is furnished at 30 cts. per foot.

Extra couplings, 50 cts. per set.

Double-Acting Pump Sprayer and Knapsack Tank

THE SAME SPRAY WITH HALF THE LABOR

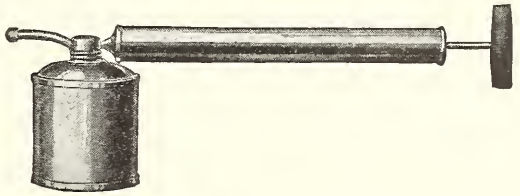


Pump.—This Pump is the ideal all-purpose sprayer. Its field is practically unlimited, as it may be used for spraying trees, vines, garden truck, potatoes, and any field crops. Made entirely of brass, doing away with all danger of corrosion. This Pump is double-acting, which gives a continuous spray, a distinct advantage over single-acting Pumps in that *the pump works on both the up and the down stroke*. The Pump cylinder is small in diameter, and in a test a pressure of 180 pounds to the square inch was raised with very little labor.

Knapsack Tank.—Where a portable tank for field or garden work is needed, we recommend our patrons' purchasing the Knapsack Tank as well as the Pump.

OUTFITS AND EQUIPMENT

Double-Acting pump, with 2½ feet of ½-inch suction hose, nozzle, and strainer, complete.....$5 00
Knapsack galvanized-iron tank, for field or garden work..... 3 00
Extension rod, curved brass..... 50
Two-row attachment of solid brass, for spraying two rows at a time..... 1 50



S. & W. Co.'s Continuous Sprayer

Will handle all solutions, insecticides, and disinfectants. Used in the greenhouse, kitchen-garden, window-garden, for rose bushes, and in the poultry-house. Two spray caps—one straight, the other at an angle for reaching under leaves or spraying directly down. Construction of tank permits the Sprayer to be operated at any angle, and it will not tip over when filling. All tin, 80 cts.; tin pump, brass tank, $1; all brass, $1.50. Weight, 3 lbs.

S. & W. CO.'S BRASS SYRINGES

These Syringes are applicable for all horticultural purposes in the conservatory and garden. They are fitted with roses and jets for ejecting water in one stream or dispersing it in a fine or coarse spray, as required. Specially adapted for applying fluid insecticides.

No. A. Barrel, 12 in. long, diam. 1 in. One spray rose and one jet, $3.50. Weight, 3 lbs.

No. G. Barrel 16 inches long, diam. 1½ in. One spray rose and one stream jet, side attachments and elbow joint for sprinkling under foliage, $6. Weight, 4 lbs.

No. H. Sheet-brass Syringe, with fixed spray rose. Barrel 16 inches long, diam. 1½ inches, $3.75. Weight, 4 lbs.

No. 2. Barrel 13½ inches long, diam. ⅛in. One coarse and one fine spray rose and one jet, side attachment, $5.50. Weight, 4 lbs.

No. 10. Barrel 18 inches long, diam. 1½ inches. One coarse and one fine spray rose and one stream jet, with patent valves and elbow joint for sprinkling under the foliage, $8. Weight, 5 lbs.

No. 11. Same as No. 10, without patent valves, $6.75. Weight, 5 lbs.

Plant-Supports, Grape-Bags, Hay-Caps and Celery Bleachers

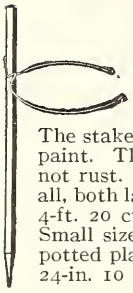
Hay-Caps for protecting and curing hay

Hay-Caps for Protecting and Curing Crops

Handling the hay crop, so that the maximum amount of digestible nutriments are retained, demands good management and good tools. In preparing for the hay-making season, the wise farmer includes with his necessary appliances, hay-caps for protecting the curing crops. The hay-caps supplied by Stumpp & Walter Co., as shown in the illustration, are made substantially of heavy waterproof sheeting. In order to hold the hay-caps down, eyelets are provided in each corner to attach weights. Our hay-caps are valuable not only for protecting hay and alfalfa from rain and dew, but also for curing crops. Hay and alfalfa have a better appearance and contain more nutriment when cured in this manner.

Size	Doz. lots	100 lots	250 lots	500 lots
40 x 40 inch	$12 60	$1 00 each	$0 95 each	$0 90 each
50 x 50 inch	16 80	1 35 each	1 30 each	1 25 each
60 x 60 inch	21 00	1 70 each	1 65 each	1 60 each

Adjusto Plant Support



It is adjusted in a jiffy to any height to conform to the plant's growth. It is indispensable for Tomatoes, Roses, Hydrangeas and Dahlias, in fact, everything on the lawn or in the garden that needs a support. The stake is made of hard wood having a protective coat of green paint. The heavy spring wire is also painted green and so will not rust. The price is very moderate and is within the reach of all, both large and small growers. 3-ft. 20 cts. each, $1.75 per doz.; 4-ft. 20 cts. each, $2 per doz.; 5-ft. 25 cts. each, $2.50 per doz. Small sizes, same as above, 18 and 24 inches, suitable for small potted plants, carnations, etc. 18-in. 7 cts. each, 75 cts. per doz.; 24-in. 10 cts. each, $1 per doz.

Shuredry Hay-Stack Covers

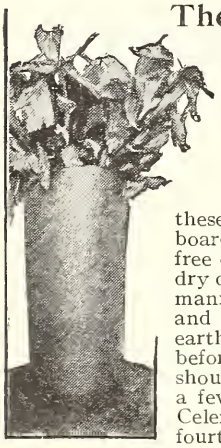
The Shuredry Hay-Stack Covers are substantially made of waterproof cloth and not affected by the weather. They will not heat, stick, or crack. The Shuredry Hay-Stack Covers are valuable for protecting grain as well as hay and alfalfa when stacked out in the field.

Size	Each	Size	Each
8 x 10 feet	$12 00	20 x 20 feet	$60 00
10 x 10 feet	15 00	25 x 25 feet	94 00
12 x 12 feet	22 00	30 x 30 feet	135 00
15 x 14 feet	32 00		

Other sizes than listed can be furnished. Prices on application

The Ball Celery-Bleaching Tubes

THE QUICKEST BLEACHER ON EARTH



The Ball Celery Bleaching-Tubes are the greatest labor- and money-savers yet introduced for the benefit of the celery growers. This new system of bleaching celery is being rapidly adopted in place of the old and expensive way of using boards and banking up. Some of its many advantages are: Celery will not rot in these tubes in wet weather as it frequently will when boards or strips of paper are used. Each plant has a free circulation of air all around, which allows it to dry out quickly after a rain. Celery bleached in this manner is ready for the table much earlier in the fall and positively sweeter, cleaner and free from all earthy flavor. Celery should be nearly full-grown before putting on the bleaching tubes. The bleachers should hug the celery close, but not tight. Trim off a few leaves when the plants are unusually large. Celery will be in prime condition from eight to fourteen days after the tubes are placed. The 6 x 12-inch size is generally used on medium or average size celery; the 6½ x 13 is for larger stalks; the 7 x 14 size is best for very large celery, especially the green varieties, which usually grow much larger than the self-bleaching kinds. Bleaching is done better when the temperature ranges between 50 and 75 degrees.

Size	Doz.	100	1,000
6 x 12-inch	$0 70	$4 00	$35 00
6½ x 13-inch	80	4 50	40 00
7 x 14-inch	90	5 25	46 00

Handles for use in placing tubes. Brass $4.50, Tin $1.75. For bleachers sent by parcel post allow 2 pounds per dozen.

SEND FOR DESCRIPTIVE CIRCULAR WITH ILLUSTRATIONS

Grape-Protecting Bags

When grapes are forming they require protection from mildew and blackrot, also attacks by bees, birds and insects. Many of our fruit-growers are using the grape-protecting bags every season. They have learned by experience that the protected fruit soon saves the cost of the bags. We supply best quality string-tied bags as shown in illustration.

Size	100	1,000
Opaque	$1 50	$12 50
Transparent	2 50	22 50

Protecting bags fastened with wires of good quality but lighter than the string-tied bags. Wires are furnished with bags.

Size	100	1,000
No. 2	$0 60	$5 25
No. 3	70	6 00
No. 4	80	6 75

Extra Heavy Bamboo Poles

Used to support dahlia plants and young trees. 7 feet long and ¾ to 1 inch in diameter at the butt end. $2 per doz., $12 per 100.

ALL PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE

REMEDIES FOR INSECTS AND FUNGUS

*NOTE.—Insecticides marked * can be sent by Parcel Post at purchaser's expense. Consult your local postoffice for rate from New York*

ALL PRICES SUBJECT TO MARKET CHANGES

Ant Powder. An effective exterminator of ants and roaches. It contains 50 per cent of active sodium fluoride. Sprinkle the powder wherever the insects travel and they will disappear. ½-lb. can 30c.

Aphine. Effective against all soft-bodied and plant-sucking insects, such as green, black, and white fly, red spider, thrips, mealy bug, brown and white scale. Used as a spray when diluted with water in the proportions as directed on each can. An insecticide which can be used indoors and in the garden. An excellent cleanser for house plants. Gal. $3.75, qt. $1.25, pt. 65 cts., ½pt. 40 cts., ¼pt. 25 cts.

Arsenate of Lead, Powder. Owing to the deterioration of lead in paste form, we have decided to discontinue handling it, and strongly recommend the powder form, which is better than Paris green, does not burn the foliage, goes twice as far, and is easier to handle. Dilute 1 pound to 50 gallons of water. ½lb. 25 cts., lb. 50 cts., 5 lbs. $2.25, 10 lbs. $4, 25 lbs. $9, 50 lbs. $15, 100 lbs. $27.50.

Atomic Sulphur. A complete fungicide, suitable for use during the summer on all fruit trees. Controls rots, scabs, and fungous diseases of the peach, apple, pear, plum, etc. Atomic Sulphur is a yellowish paste, and from 2 to 7 pounds, according to the season and variety, are mixed with 50 gallons of water. Full directions accompany the product. Lb. bottles 35 cts., 5-lb. kegs $1.50, 10 lbs. $2.75.

Black-Leaf 40. A concentrated solution of nicotine sulphate; an excellent spray for black aphides and sucking insects of all kinds. Dilute one part to 900 or 1,000 parts of water, according to treatment. Full directions on each package. 1-oz. bottle 35 cts., ½-lb. tin $1.25, 2 lbs. $3.50, 10 lbs. $13.50.

Quick Bordeaux Material. Makes best Bordeaux mixture for apples, grapes, and vegetables of all kinds. Is different from other prepared fungicides on account of the physical condition of the materials, which permits their going into solution quickly, at the same time giving a perfect Bordeaux mixture, fresh and strong. A pound package makes 5 gallons of perfect Bordeaux mixture. Lb. 35 cts., 5 lbs. $1.25, 10 lbs. $2.

Bordeaux Mixture, Dry Powder. One of the best fungicides known, on account of its metallic copper. Copper in this form stimulates the growth of plants on which it is applied, acting as a tonic. Bordeaux Mixture is the recognized fungicide for the control of most fungous diseases of fruits and ground crops. Dilute 4 to 4½ pounds to 50 gallons of water. ½lb. 20 cts., lb. 35 cts., 5 lbs. $1.50, 10 lbs. $2.75, 25 lbs. $5.75, 50 lbs. $10, 100 lbs. $17.25.

Bordo-Lead, Dry Powder. Insecticide and fungicide consisting of arsenate of lead and bordeaux mixture in dry form. It has sufficient arsenate of lead to kill chewing insects and sufficient bordeaux mixture to control most fungous diseases, blight, rot, and mildew. ½lb. 25 cts., lb. 50 cts., 5 lbs. $2.25, 10 lbs. $4.25, 25 lbs. $9.25, 50 lbs. $16.50, 100 lbs. $30.

B. T. S. A definite chemical compound of sulphur with barium in which all of the sulphur and all of the barium are available as active ingredients. B. T. S. may be substituted for lime-sulphur solution in all spraying operations. This means that it can be used in both dormant and growing period applications in the place of the solution. Lb. 35 cts., 5 lbs. $1.50, 10 lbs. $2.75, 25 lbs. $6.

***Bug Death.** Largely used instead of Paris green. It is claimed to have the same effect. The manufacturers say that it acts as a fertilizer as well as an insecticide. It comes in powder form, and is applied pure. Not poisonous to persons. Lb. 25 cts., 3 lbs. 50 cts., 5 lbs. 75 cts., 12½ lbs. $1.40, 100 lbs. $10. We recommend the **Dickey Bug Death Duster** for use in applying Bug Death, dry, to small flower- or vegetable-gardens. It is a mighty handy thing to have around the house. 60 cts.

Bug Death Sifter. $1 each.

Bug Death Aphis. This preparation is for sucking insects, aphis, and other lice. It has been used for many years in orchards and garden work, especially for peas and beans. 12-oz. pkg. 25 cts., 10 lbs. $1.40, 80-lb. keg $10, 150 lbs. $17.

Model B. Dust Guns. $1.25 each.

Calcium Arsenate. Known for its high arsenic content. It is probably the most effective arsenical insecticide on the market. Can be used for spraying potatoes, tobacco, and is the only remedy for cotton boll-weevil. Do not use this on stone fruits, such as plum, peach, and cherry. For potato beetles and many other chewing insects use 1 to 2 pounds to 50 gallons of water adding about 2 pounds of lime. ½lb. 20 cts., lb. 40 cts., 5 lbs. $1.75, 10 lbs. $3.25, 25 lbs. $7, 50 lbs. $12, 100 lbs. $21.

Copper Solution Ammoniated. A fungicide the same as bordeaux mixture; the essential ingredient, carbonate of copper, being dissolved in ammonia in this, while in bordeaux it is counteracted by lime. For late sprayings, when fruits are nearing maturity, or plants in bloom, copper solutions are usually used. Qt. $1.25, gal. $4.

***Cut-Worm Killer.** A coarse powder for sprinkling near the plants. It has an enticing odor, and the worms prefer it to vegetation. Chickens and birds will not be poisoned if they eat the worms killed by it. Don't use poisonous cut-worm killers—they kill the birds. Lb. 35 cts., 5-lb. tin $1.50, 25 lbs. $5.

Fish-Oil Soap. For mild forms of scale, and is an excellent summer spray, when something stronger cannot be used, where the San José scale exists. It is good for washing off lemon trees, oleanders and almost anything that would be infested with a soft-shelled or in fact almost any kind of insect. Dissolves in water according to various purposes. Lb. 25 cts., 5 lbs. $1.10, 10 lbs. $2, 25 lbs. $4, 100 lbs. $15.

Formaldehyde. Used for destroying disease germs that affect animal and plant life; also as a preventive for potato scab, onion and grain smuts. A pound to 15 gallons of water. A gallon of solution to a bushel of seed is required for treatment. Sold in 1-lb. (1 pint) bottles. 50 cts. each; 60-lb. keg $18.

Fungine. An infallible remedy for mildew, rust, wilt, bench-rot, and other blights affecting flowers, fruits, and vegetables. Highly indorsed by leading growers. It is equally effective under glass and out-of-doors. A spraying material which is diluted with water, and does not stain foliage. Gal. $3.75, qt. $1.25, pt. 65c., ½pt. 40c.

***Grape Dust.** For mold, mildew, or rust-mites, either in the greenhouses or open air. 5 lbs. 85 cts., 10 lbs. $1.60, 25 lbs. $3.75.

Hellebore, Powdered. Good for exterminating currant worms. ½lb. 35 cts., lb. 60 cts., 5 lbs. $2.75.

Herbicide. See Weed Killers, page 174.

Hortex. A superior sulphur-arsenate-nicotine dust testing 2 per cent pure nicotine. This all-in-one mixture is used for the control of many fungous diseases, chewing insects, and sucking insects. Used as a dust it cannot be surpassed for general garden use. ½-lb. can, 25 cts., lb. can 50 cts., 10-lb. can $3.50.

Kerosene Miscible Oil. Improved Kerosene Emulsion. Mixes easier, has greater killing power, and is especially valuable against all soft-bodied insects. Can be used on practically all insects for which nicotine is employed. For woolly aphis on apple and thorn it is much more effective than nicotine. Contains 80 per cent kerosene. Dilute 1 part of Oil to 16 parts of water. Tender plants 1 part to 36 parts of water. Pt. 40 cts., qt. 70 cts., gal. $1.75, 5 gals. $7, 50 gals. $50.

Lemon Oil. Odorless and poisonless; one to thirty to fifty parts of water. Destroys mealy bug, scale, thrips, red spider, black and green fly, caterpillar, etc. ½pt. 40 cts., pt. 60 cts., qt. $1, ½gal. $1.75, gal. $3.

Lime-Sulphur, Bowker's Concentrated. For destroying San José scale. One gallon makes ten gallons of spray; dilute with cold water. Bowker's Lime-Sulphur is manufactured under the direct personal supervision of skilled graduate chemists who have devoted years to manufacturing spraying materials, with the one dominant idea that any spray to be worth branding "Bowker's" must be the best. Bowker's is "Lime-Sulphur" with the guesswork left out. Qt. 50 cts., 1-gal. can $1, 5-gal. can $3.25, half-barrel (about 25 gals.) $8, barrel (50 gals.) $14.

Melrosine. A real remedy for rose-bug troubles. Dilute 1 pint and 3½ ounces with 3 gallons of water, for general use. Trial can size, 50c. Pt. can $1, qt. can $1.75, ½-gal. can $3.25, gal. can $6.

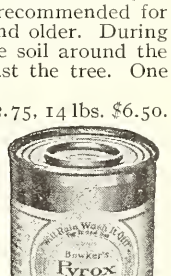
Nico-Fume Liquid. This preparation is a free nicotine preparation, and is used by many of the leading growers. ¼-lb. can 75 cts., 1-lb. can $2.25, 4-lb. can (½-gal.) $8, 8 lbs. (1 gal.) $15.

***Nico-Fume Paper.** This is a paper treated with nicotine, giving off dense fumes of strong nicotine when ignited. It is also used for tying near blooms of chrysanthemums in early fall to keep down insects. Preferred by many who do not wish to spray or vaporize. Box of 24 sheets, $1.25, box of 144 sheets $5.50, box of 288 sheets $10.

Para-Dichlorobenzene. (Crystal Gas.) Highly recommended for destroying the peach borers in trees four years and older. During September a ring of the crystals is placed on the soil around the trunk and covered by mounding the earth against the tree. One ounce is sufficient for each tree. Lb. 75 cts.

Paris Green. ¼lb. 20c., ½lb. 35c., lb. 60c., 5 lbs. $2.75, 14 lbs. $6.50.

Pyrox (Bowker's). The one best and safest all-round spray which kills all leaf-eating insects and prevents blights and all fungous troubles, without injury, on fruit trees, grapevines, currant bushes, potatoes, cantaloupes, cucumbers, and other garden vegetables, also on rose bushes, shrubbery, etc. It is a creamy paste which looks like paint and "sticks like paint." It needs only to be mixed with cold water and it is ready to apply. Once tried, always used. Lb. 50c., 5 lbs. $1.75, 10 lbs. $3.15, 25 lbs. $6.50, 50 lbs. $11.25, 100 lbs. $18, 300 lbs. $51.



Scalecide. Soluble crude oil. Used for the destruction of the San José scale. Dilute at the rate of one gallon to twenty gallons of water. Scalecide does not clog nozzles, hose or pump, and is pleasant to use. This preparation is perhaps the best known and is very widely advertised. Orchardists throughout the country use it in large quantities. Trees may be sprayed in winter and early spring before they start to come to bud. Qt. 75c., gal. $2, 5 gals. $6.25, 10 gals. $10.60, 30-gal. bbl. $26, 50-gal. bbl. $38.

REMEDIES FOR INSECTS AND FUNGUS

NOTE.—Insecticides marked can be sent by Parcel Post at purchaser's expense. Consult your local post-office for rates from New York*

ALL PRICES SUBJECT TO MARKET CHANGES

***Slug-Shot.** The standard remedy for currant worms, rose slugs, cabbage worms, and almost any soft-shelled insects that infest the garden. Lb. 25 cts., 5 lbs. 75 cts., 10 lbs. $1.20, 125-lb. keg $12.50.

Solomia. A powerful insecticide and fungicide for spraying. A scientific preparation for the destruction of insect pests of all kinds. Is non-poisonous and harmless to all but insect life. It can be sprayed on crops, fruit, flowers or grass without causing them the slightest harm. Pt. 85 cts., qt. $1.50, gal. $4.50.

Styptic. To prevent bleeding of vines after pruning. Bottle $2.

Sulco-V. B. A combined contact insecticide and fungicide of unusual merit for the control of San José and other scale insects, aphis, white fly, pear psylla, red spider, red bug, leaf-blister, mite, thrips, citrus rust mite, cabbage lice, and fungous spores causing peach-leaf curl, brown or ripe rot of peach and other stone fruits, apple and pear scab, smut and mildew on various plants, etc. Dilute 1 to 25 and up to 1 to 100, according to requirements. Qt. 60 cts., gal. $1.75, 5 gals. $7, 10 gals. $12.50, ½bbl. (about 30 gals.) $25.50, bbl. (50 gals.) $37.50.

Sulfocide. An efficient summer spray for the control of scab and black rot on fruit trees. Excellent for mildew and black rot of roses and for similar fungous troubles of other plants. For general use, dilute one gallon to 200 gallons of water. Qt. can 75 cts., gal. can $2.25, 5-gal. can $8.75, 10-gal. can $15, 30-gal. bbl. $39, 50-gal. bbl. $60.

***Sulphur.** Used principally in greenhouse for checking mildew (see below for Campbell's Sulphur Vaporizers). Lb. 25 cts., 5 lbs. $1, 10 lbs. $1.60, 100 lbs. $12.

Sulpho-Tobacco Soap. A combination of tobacco extract and sulphur, excellent for washing and spraying plants; dissolve in warm water. 3-oz. pkg. 15 cts., 8-oz. pkg. 25 cts., 10-lb. pkg. $3.

***Tobacco Dust (Kilmdead).** The best of the Tobacco Dusts for dusting or fumigating. Lb. 25 cts., 5 lbs. 75 cts., 25 lbs. $2, 50 lbs. $3.50, 100 lbs. $6.

Tobacco Stems. Used for fumigating and under benches in greenhouses. Bale of 100 lbs. $4.

***Tree Tanglefoot.** A paste preparation for painting around the trunks of trees, in the form of a band. Caterpillars and other crawling pests cannot get over it. Lb. 60 cts., 5-lb. can $2.75, 10-lb. can $5.25, 25 lbs. $11.

Tree Wound Paint. Prevents decay. A residuum, penetrating, antiseptic paint that is not affected by heat, cold or moisture. Does not peel, crack or get brittle. Stops tree bleeding. Pt. 60 cts., qt. $1, gal. $2.50, 5 gals. $10.

Wilson's O. K. Plant Spray. For roses, chrysanthemums, evergreens, and all plants affected with scale or insects, under glass or outside.

Recommended for rose bugs. One part is mixed with from 10 to 20 parts of water. Qt. $1, gal. $3, 5 gals. $10, ½ bbl. $50, bbl. $90.

Weed Killers

Herbicide. There is nothing more annoying to the well-kept home grounds than weeds constantly coming up in the roadways, paths and gutters. This weed killer may be applied by means of a sprinkling apparatus of any kind from the small sprinkling can to the large street-sprinkling wagon. It is harmless to stone, woodwork, or shoes and is perfectly odorless. One thorough application will kill all weeds as well as the roots of the same. One gallon diluted 1 part to 40 parts of water is sufficient to cover 100 to 150 square yards of space. Qt.-can, 70 cts., ½-gal.-can $1.20, gal.-can $2, 5-gal. can $8, 10-gal. can $15, 30-gal. drum $33, 50-gal. bbl. $50.

***Climax Lawn Sand.** A combination of carefully dried and finely ground chemicals. Destroys weeds. 3½-lb. can 65c., 7-lb. can $1.25, 14-lb. can $2, 28-lb. pkg. $3.75, 56-lb. pkg. $7.25, 140 lbs. $14.

Worm and Maggot Eradicators

MAG-O-TITE. Insures a good crop of radishes, kale, cabbage, onions, turnips, cauliflower, etc. You can now sow any of these crops and be certain of protection against the destructive root maggot, earthworm and other pests. **Quantity required:** A 2-lb. package will cover about 300 feet of drill, mixed with the soil at planting time, with an occasional top dusting as a preventive during the growing period. For field culture the approximate quantity required is from 300 to 500 lbs. per acre.

2-lb. pkg....	$0 40	8-lb. pkg....	$1 25	100-lb. sack...	$9 50
4-lb. pkg....	70	25-lb. sack...	3 00		

Vermine. A soil sterilizer and germicide for all soil vermin, such as cut-, eel-, wire-, and grub-worms, slugs, root-lice, maggots, and ants. Use one part of Vermine to four hundred parts of water, thoroughly soaking the ground. It does its work effectively without injury to vegetation, and protects your crops and lawns against the ravages under the soil. ¼pt. 30 cts., ½pt. 50 cts., pt. 75 cts., qt. $1.25, 1 gal. $3.75.

Vermol. Common earthworms or "angleworms" are a decided nuisance in lawns, turf courts, and putting-greens. The casts are unsightly, impair the playing qualities of greens and add greatly to the upkeep cost, as daily sweeping and rolling become necessary. To rid greens, courts or lawns of worms, apply Vermol evenly at the rate of one-half pound to the square yard, and flood the greens immediately. If possible, the application should be made on a warm, damp day, early in May. The worms will come to the surface, where they may be raked or swept up and removed. One application each season is usually sufficient. Sold in powder form. 25 lbs. $2.25, 50 lbs. $4, 100 lbs. $7, ¼ton $25, ½ton $45, ton $85.

X-L-ALL Liquid Insecticide. Destroys mealy-bug, scale, thrip, red spider, green and black fly, caterpillars, blight and all insect pests in the garden; it is perfectly safe to use on tender plants. For the winter dressing of vines, figs, peaches and other fruit trees, it has been proved to be the safest and most valuable preparation in the market. Leaves the foliage bright and clean and, much improved in appearance. Qt. $2, ½gal. $3.75, gal. $7.

X-L-ALL Vaporizing Compound. Used very extensively abroad for vaporizing. No. 1 (sufficient for 40,000 cubic feet) $8; No. 2 (sufficient for 20,000 cubic feet) $5; No. 3 (sufficient for 10,000 cubic feet) $2.50.

Defiance

Fumigators and Vaporizers

Fumigator, "Eureka." For fumigating with tobacco stems.

No. 1, holds ½peck stems	$3 00
No. 2, holds 1 peck stems	4 00
No. 3, holds ½bushel stems	5 25

Vaporizing Lamp, Defiance. Practical and indestructible; all metal; burns kerosene; used for dispensing fumes of Nicotine preparations. 75 cts. each.

Vaporizer, Campbell's Patent Sulphur. Designed to vaporize sulphur in greenhouses without danger. Most useful for killing mildew and other fungous diseases.

No. 1, for houses up to 5,000 cubic feet of space	$7 00
No. 2, for houses up to 10,000 cubic feet of space	9 00

Glass Balls for above. Box of 6, 25 cts.

Yellow Powder. Tin. 30 cts.

Hollow, or **Solid Wicks,** for either size, 25 cts.

X-L-ALL Vaporizing Lamp. A lamp specially designed for vaporizing of X-L-All Compound. Small size, $1; larger size, $1.25.

Sulphur Vaporizer

CHARCOAL, LEAF-MOLD, PEAT AND MOSS

Charcoal. For prices and sizes, see page 175.

Leaf-Mold. Used for preparing rhododendron beds. Bag $2.50.

Moss, Live Green Sphagnum. Freshly gathered in season. Bbl. $5.

Moss, Sheet, Natural Green. For covering the pots or tubs of large plants; sheets range in size about 1 foot wide and from 2 to 5 feet long. Bag (10 lbs.) $5.

Moss, Dry Sphagnum. Large bale $4.

Peat Moss. For top-dressing lawns, mixing with soil and mulching plants. Superior to Cocoanut Fiber. Bales (about 220 lbs.) $6.

Peat. (Osmundi.) For orchids. Bbl. $5.

Peat, Rotted, Fibrous. An excellent material for mixing with potting soil, for many plants. This peat has been dug from an old bog and exposed for a number of years until it has become thoroughly decayed. Bag $2.50.

FERTILIZERS

Our list contains the very best and most modern kinds. We can quote special prices on carload quantities

All prices subject to market changes

No. 2 Bone Dust for General Use. A bone dust about pinhead size, with a fair percentage of bone flour. Excellent for top-dressing lawns as well as good for mixing with soil. Sold largely to carnation- and rose-growers for top-dressing and for mixing with soil. 5 lbs. 50 cts., 10 lbs. 90 cts., 25 lbs. $1.75, 50 lbs. $2.50, 100 lbs. $4.50, ton $65.

S. & W. Co.'s Charcoal. For mixing with soil for pot-plants and vines. No. 1, Powdered; No. 2, Medium; No. 3, Lumps, 3 to 4 inches. Any size, per bag of 50 lbs. $2.50, 100 lbs. $4.50, 1,000 lbs. $35, 2,000 lbs. $65.

S. & W. Co.'s Potato Manure. This brand is our leader, and is manufactured from a bone-and-meat basis; it is high in analysis and a strictly high-grade fertilizer. It is a brand that has given universal satisfaction for all root-crops, and it is unequaled for potatoes, gardening or truck-farming. 5 lbs. 45 cts., 10 lbs. 80 cts., 25 lbs. $1.75, 50 lbs. $3, 100 lbs. $5.50, 500 lbs. $20, 1,000 lbs. $37.50, ton $70.

S. & W. Co.'s General Garden Fertilizer. This Fertilizer is for general garden work for vegetables, flowers and fruits. 10 lbs. sufficient for space 15 x 15 ft.; 500 lbs. to the acre. 5 lbs. 45 cts., 10-lbs. 80 cts., 25 lbs. $1.75, 50 lbs. $3, 100 lbs. $5.50, ton $75.

S. & W. Co.'s Corn Fertilizer. This is a brand which many farmers prefer to employ who have sufficient quantities of stable manure for broadcast application, using this brand in the hill or drill. We have many testimonials as to its quality for growing splendid crops of corn. 50 lbs. $2, 100 lbs. $3.50, 500 lbs. $15, 1,000 lbs. $29, ton $55.

GENERAL LIST OF FERTILIZERS

The prices quoted include freight paid to your station in 100-pound lots or over, except where noted; on lesser quantities purchaser pays delivery charges.

ASHES, CANADA HARDWOOD. Quantity required: Apply one to two tons to the acre, as one heavy application will help much more than the same quantity would applied in fractions. Apply in early spring or late fall. Barrels of about 200 lbs., $5; ton in barrels, $40.

BASIC SLAG. Very effective on muck soil or soils of acid nature. Contains free lime in addition to available phosphoric acid. Well suited for leguminous crops such as alfalfa, clover, etc. 50 lbs. $2, 100 lbs. $3.75, 500 lbs. $17, ton $60.

BLOOD. (Dried.) Excellent for indoor culture of flowering plants, such as carnations, roses, etc. Its chief element is nitrogen. 10 lbs. $1, 50 lbs. $3.25, 100 lbs. $6, 500 lbs. $27.50, 2,000 lbs. $100.

BON ARBOR. A concentrated chemical fertilizer to be used in liquid or powder form according to the directions on the package. Dilute 1 pound with 30 gallons of water. ½-lb. pkg. 50 cts., 1-lb. pkg. 75c., 5 lbs. $2.50, 50 lbs. $17. In lots of 100 lbs. or over, $30 per 100 lbs.

CLAY'S CELEBRATED FERTILIZER. In bags, ⅛cwt. (14 lbs.), $2.25; ¼cwt. (28 lbs.), $4; ½cwt. (56 lbs.), $7; 1 cwt. (112 lbs.), $12.

COW or CATTLE MANURE, Shredded. One sack of this is equal to one cartload of fresh cow manure; is convenient to handle, making it possible for everyone to get this usually scarce article at all times. In 100-lb. sacks only. 100 lbs. $4.50, 500 lbs. $15, 1,000 lbs. $28, ton $55.

EMERALD GRASS FERTILIZER. A clean, portable, and convenient lawn dressing, which we have found to be never-failing in inducing a rapid and rich green growth. It should be sown broadcast in the spring or fall. It is in every way more desirable than manure. The use of Emerald Grass Fertilizer entirely does away with the old practice of top-dressing lawns with stable manure. It is best to apply during dull weather and, if applied during warm weather, soak down with a hose after applying. 5 lbs. 45 cts., 10 lbs. 80 cts., 25 lbs. $1.75, 50 lbs. $3, 100 lbs. $5.50, 500 lbs. $20, 2,000 lbs. (ton) $75.

FARMOGERM. Garden-size bottle 50 cts., acre-size bottle $1, 3-acre size bottle $2.50, 12-acre size bottle $9, postpaid. When ordering, state what seed legume you wish to inoculate. Pamphlet telling all about inoculation free on request.

HUMUS. Nature's product for enriching lawns, soil for all kinds of gardening, and for stimulating potted plants. Used in making fine lawns, especially where soil is poor. 50 lbs. $2, 100-lb. box $3.50, 5 boxes (500 lbs.) $15, 20 boxes (2,000 lbs.) $40.

LIME, Agricultural, Hydrated. This lime is specially prepared for use on the soil and is a combination of calcium-hydrate and calcium-carbonate, finely pulverized. Quantity required: Heavy soils, 2,000 to 6,000 lbs. to the acre; light, sandy soils, 1,000 to 3,000 lbs. to the acre, according to their apparent need. 5 lbs. 30 cts., 10 lbs. 50 cts., 25 lbs. $1, 100-lb. bag $2, 500 lbs. $8.75, ton $30. In lots of 3 tons or over, $27 per ton. Price, delivered in carload lots to your station, upon request.

LIMESTONE, PULVERIZED. It is made from the purest crystalline, white limestone obtainable, may be applied at any time of the year without danger. It is good for all crops, especially for the successful growing of alfalfa, and, owing to its extreme fineness, admits of very even distribution. Apply 2 tons to the acre. Put up in 100-lb. bags, $1.50, 500 lbs. $6, 1,000 lbs. $10, ton $18. In carload lots, in bags, f. o. b. works, $9.50 per ton.

LIMAG. (*Hydrated Lime, Hydrated Magnesium, and Potash.*) For all crops. Fertilizes and sweetens soil and destroys wireworms and other pests. 100 lbs. $3, 500 lbs. $12.50, 2,000 lbs. $40.

MURIATE OF POTASH. 150 lbs. per acre. Potatoes and root crops. 5 lbs. 60 cts., 10 lbs. $1, 25 lbs. $2, 50 lbs. $3.25, 100 lbs. $6.

NITRATE OF SODA. Quantity required: Being extremely soluble, it is usually applied after the plants are above ground, 100 to 500 lbs. to the acre. 1-lb. tin 25 cts., 5-lb. pkg. 60 cts., 10-lb. pkg. $1, 25-lb. bag $1.75, 50-lb. bag $3, 100 lbs. $5.50.

OYAMA PLANT FOOD. Makes plants thrive. By using Oyama on house plants it will keep them in bloom all winter and as green and luxuriant as if grown outdoors in the summer. Full directions with every package. House Plant Size, makes 6 gallons, 35 cts. Garden Size, makes 32 gallons, $1.25, postpaid.

PHOSPHATE, High-Grade Acid or Rock. Apply 1,000 lbs. to the acre. Used for mixing with other fertilizers to increase the phosphoric acid analysis. In 100-lb. sacks only, $3, ton $40.

SALT. For agricultural purposes, asparagus beds and putting on walks and roads to kill weeds. Apply 600 to 800 lbs. to the acre in early spring. 25 lbs. $1, 50 lbs. $1.50, 100 lbs. $2.25, 200 lbs. $4, ton $35.

SCOTCH SOOT. Genuine imported. For stimulating a healthy growth of dark green foliage, and it will free the soil of slugs, grubs and cut-worms. 10 lbs. $1.25, 50 lbs. $3.75, 100 lbs. $7.

SHEEP MANURE, PURE PULVERIZED. A pure, natural, nutritious manure. Immediate and lasting in effect. Excellent for mixing with the soil for greenhouse plants. In the vegetable-garden it promotes a rapid, steady growth until maturity. It makes a rich liquid manure. Quantity required: For garden and field-crops, one or two tons to the acre; one-half before plowing, the balance before harrowing. For top-dressing grass, use one ton to the acre, applied in fall or early spring. 100-lb. bag $5, 500 lbs. $18, ton $65. In packages of 5 lbs. 40 cts., 10 lbs. 75 cts.

SPENT MUSHROOM SOIL. Partly decayed horse manure. A plant-food low in price and high both in fertilizing value and humic content. There is no better material for making a compost heap, for top-dressing putting-greens and fine lawns. Prices on carload lots delivered to your station quoted on request.

SULPHATE OF AMMONIA. The most concentrated nitrogenous top-dressing on the market. Contains ammonia in a form quickly available but not readily leached from the soil. It is fine and dry, and easily spread by hand or by drill. The crop-producing power of the ammonia is equal to that of any fertilizer. 5 lbs. 75 cts., 10 lbs. $1.25, 25 lbs. $2.50, 50 lbs. $4.25, 100 lbs. $7.50.

TANKAGE. The mixture of blood and bone can be used for general garden crops, trees, or in the greenhouses. For outside use one-half to one ton per acre. 10 lbs. 75 cts., 25 lbs. $1.50, 50 lbs. $2.50, 100 lbs. $4.50, 500 lbs. $22.50, 2,000 lbs. $80.

THOMSON'S CHRYSANTHEMUM MANURE. A highly concentrated English chemical fertilizer used by the leading private gardeners in America and abroad. May be used in liquid or dry form. 7-lb. bag $1.75, 14-lb. bag $3, 28-lb. bag $5.50, 56-lb. bag $10.

THOMSON'S SPECIAL FLOWER, VEGETABLE and VINE MANURE. 14-lb. bag $1.75, 28-lb. bag $3, 56-lb. bag $5.50, 112-lb. bag $10.

All legume crops should be inoculated. Few soils contain sufficient bacteria to provide self-inoculation. Artificial inoculation with pure cultures has long since been determined by the experiment stations to be the only safe and sure way

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Quantity	ANNUAL FLOWER SEED	Price	Quantity	ANNUAL FLOWER SEED	Price
	SWEET SULTANS (Centaurea imperialis.) See page 69.			**CALLIOPSIS** See page 76.	
.....	White	....	.....	Golden Wave	....
.....	Pink	....	.....	Crimson King	....
.....	Rose	....	.....	Marmorata	....
.....	Lilac	....	.....	Tiger Star	....
.....	Purple	....	.....	Nigra Spinosa	....
.....	Yellow	....	.....	Bicolor Nana	....
	PRICES: Pkt. 15c., ¼oz. 50c., oz. $1.50.			PRICES: Pkt. 10 cts., ¼oz. 50 cts., oz. $1.50.	
.....	COLLECTION OFFER: 1 pkt. each 6 colors, 50c., ¼oz. each 6 colors, $2.50.	....	.....	COLLECTION OFFER: 1 pkt. each 6 varieties, 50 cts., ¼oz. each 6 varieties, $2.50.	....
	SIX KING ASTERS See page 70.			**CALIFORNIA POPPIES** (Eschscholtzia.) See page 85.	
.....	Lavender King	....	.....	Carmine King	....
.....	Pink King	....	.....	Golden West	....
.....	Violet King	....	.....	Scarlet Beauty	....
.....	White King	....	.....	Geisha	....
.....	Rose King	....	.....	Vesuvius	....
.....	Crimson King	....	.....	Santa Barbara	....
	PRICES: Pkt. 15 cts., ¼oz. $1.25.			PRICES: Pkt. 10 cts., ¼oz. 50 cts., oz. $1.50.	
.....	COLLECTION OFFER: 1 pkt. each 6 Kings, 75 cts., ¼oz. each 6 Kings, $5.	....		COLLECTION OFFER: 1 pkt. each 6 varieties, 50 cts., ¼oz. each 6 varieties, $2.50.	
	THREE KING CALENDULAS (Scotch Marigolds.) See page 75.		.....		....
.....	Orange King	....		**HELICHRYSUM** (Straw Flower.) See page 86.	
.....	Golden King	....			
.....	Lemon King	....	.....	Rose Queen	....
	PRICES: Pkt. 25 cts., ¼oz. 50 cts., oz. $1.50.		.....	Snowball	....
	COLLECTION OFFER: 1 pkt. each 3 colors, 50 cts., ¼oz. each 3 colors, $1.		.....	Salmon Queen	....
			.....	Golden Ball	....

Quantity	ANNUAL FLOWER SEED	Price
	Helichrysum, continued	
.....	Fireball	....
.....	Violet Queen	....
	PRICES: Pkt. 15 cts., ¼oz. 50 cts., oz. $1.50.	
	COLLECTION OFFER: 1 pkt. each 6 varieties, 50 cts., ¼oz. each 6 varieties, $2.50.	
	MARIGOLD	
	(African and French.) See page 95.	
.....	Dwarf French, Little Brownie	....
.....	Dwarf French, Golden Ball	....
.....	Dwarf French, Lemon Ball	....
.....	Dwarf French, Mahogany	....
.....	Giant Show, Lemon	....
.....	Giant Show, Orange	....
	PRICES: Pkt. 25 cts., ¼oz. $1.	
	COLLECTION OFFER: 1 pkt. each 6 varieties, $1, ¼oz. each 6 varieties, $5.	
	ANNUAL LARKSPUR	
	See page 96.	
.....	Attraction	....
.....	Defiance	....
.....	Exquisite	....
.....	King of the Blues	....
.....	Lilac Perfection	....
.....	Loveliness	....
.....	Snow Storm	....
.....	Stella	....
.....	Tricolor	....
.....	Violet Queen	....
	PRICES: Pkt. 15 cts., ¼oz. 50 cts., oz. $1.50.	
	COLLECTION OFFER: 1 pkt. each 10 varieties, $1, ¼oz. each 10 varieties, $4.	
	IMPROVED SHIRLEY POPPIES	
	See page 105.	
.....	Wild Rose	....
.....	Carmine Shades	....
.....	Rose Shades	....
.....	Salmon Shades	....
.....	White Shades	....
.....	Mixture	....
	PRICES: Pkt. 10 cts., ¼oz. 50 cts., oz. $1.50.	
	COLLECTION OFFER: 1 pkt. each 6 forms, 50 cts., ¼oz. each 6 forms, $2.50.	
	SCABIOSA See page 106.	
.....	Azure Fairy	....
.....	Cherry-Red	....
.....	Flesh-Color	....
.....	Fiery Scarlet	....
.....	King of the Blacks	....
.....	White	....
	PRICES: Pkt. 10 cts., ¼oz. 50 cts., oz. $1.50.	
	COLLECTION OFFER: 1 pkt. each 6 varieties, 50 cts., ¼oz. each 6 varieties, $2.50.	
	SWEET PEAS	
	(12 Distinct Colors.) See page 115.	
.....	Scarlet	....
.....	White	....
.....	Bright Blue	....
.....	Carmine	....
.....	Cream	....

Quantity	ANNUAL FLOWER SEED	Price
	Sweet Peas, continued	
.....	Lavender	....
.....	Navy Blue	....
.....	Light Pink	....
.....	Cream Pink	....
.....	Maroon	....
.....	Purple	....
.....	Salmon-Pink	....
	PRICES: Pkt. 15 cts., oz. 50 cts.	
	COLLECTION OFFER: 1 pkt. each 12 distinct colors, $1, 1 oz. each 12 distinct colors, $5.	
	ZINNIAS	
	(Giant Double-flowering.) See page 116.	
.....	Giant Salmon	....
.....	Giant Rose	....
.....	Giant Yellow	....
.....	Giant White	....
.....	Giant Crimson	....
.....	Giant Scarlet	....
	PRICES: Pkt. 25 cts., ¼oz. 60 cts., oz. $2.	
	COLLECTION OFFER: 1 pkt. each 6 distinct colors, $1, ¼oz. each 6 distinct colors, $3.	
	CANNAS	
	(Three fine varieties.) See page 121.	
.....	The President. *Scarlet*	....
.....	Hungaria. *Pink*	....
.....	Richard Wallace. *Yellow*	....
	PRICES: Roots 20 cts. each, $2 per doz., $15 per 100.	
	COLLECTION OFFER: 1 root each 3 varieties, 50 cts., 6 roots each 3 varieties, $2.50.	
	GLADIOLI See page 122.	

	Each	Doz.	100	
Alice Tiplady	$0 15	$1 50	$10 00	.....
Halley	10	75	5 00	.....
Schwaben	15	1 25	8 00	.....
Peace	10	1 00	7 50	.....
Mrs. F. Pendleton	15	1 25	8 00	.....
Baron Hulot	15	1 50	9 00	.....

Quantity		Price
	SPECIAL OFFER: 5 bulbs each, 6 varieties (30 bulbs), $3; 10 bulbs each, 6 varieties (60 bulbs), $5.50; 20 bulbs each 6 varieties (120 bulbs), $10.	
	FOUR FINE EXHIBITION DAHLIAS See page 135.	

	Each	Doz.	
Mrs. Carl Salbach	$1 50	$15 00	.....
Earle Williams	2 50	25 00	.....
Emperor	4 00	40 00	.....
Insulinda	1 50	15 00	.....

Quantity		Price
	COLLECTION OFFER: 1 tuber each, Four Fine Exhibition Dahlias (4 tubers), $8; two tubers each, Four Fine Exhibition Dahlias (8 tubers), $15.	
	EVERBLOOMING ROSES See page 136.	
.....	Los Angeles	....
.....	Kaiserin Augusta Victoria	....
.....	Ophelia	....
.....	Radiance	....
.....	Gruss an Teplitz	....
.....	Duchess of Wellington	....
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